

## **LLNL Livermore Site Second Quarter 2014 Self-Monitoring Report**

This quarterly report presents the second quarter 2014 self-monitoring data for the ground water and soil vapor treatment facilities at the Lawrence Livermore National Laboratory (LLNL) Livermore Site. The volumes of ground water and soil vapor treated, and volatile organic compound (VOC) mass removed during the second quarter of 2014 are presented in Tables 1 and 2, respectively. An historical summary of VOC volume and mass removed are presented in Tables 3 and 4, respectively.

Attachment A presents results of ground water treatment facility and extraction well (ground water and soil vapor) VOC, and chromium analyses (Tables A-1 through A-4). During the second quarter of 2014, all effluent sample analytical results were within acceptable discharge limits.

Self-monitoring reports for all treatment facilities are presented in Attachment B. Monthly volumes of ground water extracted are shown in Attachment B; however, instantaneous flow rates are not shown for wells that are now only used for sampling and are not continuously pumped. The monthly volume shown for these wells is the quantity of water evacuated for sampling purposes.

A map showing Livermore Site treatment areas and treatment facility locations, and ground water elevation contour maps showing hydraulic capture zones for hydrostratigraphic units (HSUs) 1B, 2, 3A, 3B, 4, and 5, are presented in Attachment C. The contour maps for the individual HSUs are based on data collected during the second quarter of 2014.

**Table 1. Volumes of ground water and soil vapor extracted and treated at the Livermore Site, April through June 2014.**

<b>Treatment Area<sup>a</sup></b>	<b>Month</b>	<b>Volume of ground water extracted (Kgal)<sup>b</sup></b>	<b>Volume of vapor extracted (Kcf)<sup>b</sup></b>
<b>TFA</b>	<b>April</b>	<b>9,234</b>	<b>-</b>
	<b>May</b>	<b>8,791</b>	<b>-</b>
	<b>June</b>	<b>9,566</b>	<b>-</b>
<b>TFB</b>	<b>April</b>	<b>2,664</b>	<b>-</b>
	<b>May</b>	<b>2,711</b>	<b>-</b>
	<b>June</b>	<b>2,756</b>	<b>-</b>
<b>TFC</b>	<b>April</b>	<b>1,548</b>	<b>-</b>
	<b>May</b>	<b>2,633</b>	<b>-</b>
	<b>June</b>	<b>2,540</b>	<b>-</b>
<b>TFD</b>	<b>April</b>	<b>5,378</b>	<b>1,472</b>
	<b>May</b>	<b>5,278</b>	<b>853</b>
	<b>June</b>	<b>5,758</b>	<b>735</b>
<b>TFE</b>	<b>April</b>	<b>2,535</b>	<b>1,970</b>
	<b>May</b>	<b>2,297</b>	<b>1,741</b>
	<b>June</b>	<b>2,003</b>	<b>1,582</b>
<b>TFG</b>	<b>April</b>	<b>412</b>	<b>-</b>
	<b>May</b>	<b>432</b>	<b>-</b>
	<b>June</b>	<b>451</b>	<b>-</b>
<b>TFH</b>	<b>April</b>	<b>693</b>	<b>1,832</b>
	<b>May</b>	<b>668</b>	<b>1,934</b>
	<b>June</b>	<b>606</b>	<b>1,779</b>
<b>TOTAL<sup>c</sup></b>		<b>68,954</b>	<b>13,898</b>

<sup>a</sup> Totals include ground water and soil vapor extracted from the following facilities:

TFA area: TFA, TFA-E

TFB area: TFB

TFC area: TFC, TFC-E, TFC-SE

TFD area: TFD, TFD-E, TFD-HPD, TFD-S, TFD-SE, TFD-SS, TFD-W, VTFD-ETCS

TFE area: TFE-E, TFE-HS, TFE-NW, TFE-SE, TFE-SW, TFE-W, VTFE-ELM, VTFE-HS

TFG area: TFG-1, TFG-N

TFH area: TF406, TF406-NW, TF518-N, TF518-PZ, TF5475-1, TF5475-2, TF5475-3, VTF406-HS, VTF511, VTF518-PZ, VTF5475

TFF started operation in February 1993 for fuel hydrocarbon remediation. In August 1995, the regulatory agencies agreed that the vadose zone remediation was complete, and in October 1996 a No Further Action status was granted for the ground water.

<sup>b</sup> Totals are derived from individual extraction wells shown in Attachment B

<sup>c</sup> Rounded number

Kcf = thousands of cubic feet

Kgal = thousands of gallons

**Table 2. VOC mass removed at the Livermore Site, April through June 2014.**

<b>Treatment Area<sup>a</sup></b>	<b>VOC mass removed from ground water (kg)</b>	<b>VOC mass removed from soil vapor (kg)</b>	<b>Total VOC mass removed (kg) <sup>b</sup></b>
<b>TFA</b>	<b>0.9</b>	<b>-</b>	<b>0.9</b>
<b>TFB</b>	<b>0.6</b>	<b>-</b>	<b>0.6</b>
<b>TFC</b>	<b>0.7</b>	<b>-</b>	<b>0.7</b>
<b>TFD</b>	<b>4.8</b>	<b>0.5</b>	<b>5.3</b>
<b>TFE</b>	<b>1.6</b>	<b>0.6</b>	<b>2.2</b>
<b>TFG</b>	<b>0.1</b>	<b>-</b>	<b>0.1</b>
<b>TFH</b>	<b>0.1</b>	<b>3.9</b>	<b>4.0</b>
<b>TOTAL<sup>b</sup></b>	<b>8.8</b>	<b>5.0</b>	<b>13.8</b>

**Table 3. Historical summary of volumes of water and soil vapor removed at the Livermore Site through June 2014.**

<b>Treatment Area<sup>a</sup></b>	<b>Volume of ground water extracted (Mgal)</b>	<b>Volume of vapor extracted (Mcf)</b>
<b>TFA</b>	<b>2,128</b>	<b>-</b>
<b>TFB</b>	<b>512</b>	<b>-</b>
<b>TFC</b>	<b>581</b>	<b>-</b>
<b>TFD</b>	<b>1,184</b>	<b>133</b>
<b>TFE</b>	<b>422</b>	<b>208</b>
<b>TFG</b>	<b>95</b>	<b>-</b>
<b>TFH</b>	<b>183</b>	<b>288</b>
<b>TOTAL<sup>b</sup></b>	<b>5,105</b>	<b>629</b>

**Table 4. Historical summary of VOC mass removed from water and soil vapor at the Livermore Site through June 2014.**

<b>Treatment Area<sup>a</sup></b>	<b>VOC mass removed from ground water (kg)</b>	<b>VOC mass removed from soil vapor (kg)</b>	<b>Total VOC mass removed (kg) <sup>b</sup></b>
<b>TFA</b>	<b>217</b>	<b>-</b>	<b>217</b>
<b>TFB</b>	<b>85</b>	<b>-</b>	<b>85</b>
<b>TFC</b>	<b>114</b>	<b>-</b>	<b>114</b>
<b>TFD</b>	<b>897</b>	<b>100</b>	<b>997</b>
<b>TFE</b>	<b>235</b>	<b>158</b>	<b>393</b>
<b>TFG</b>	<b>13</b>	<b>-</b>	<b>13</b>
<b>TFH</b>	<b>42</b>	<b>1,285</b>	<b>1,327</b>
<b>TOTAL<sup>b</sup></b>	<b>1,603</b>	<b>1,543</b>	<b>3,146</b>

<sup>a</sup> Refer to Table 1 footnote for facilities in each treatment facility area.<sup>b</sup> Rounded number.

Abbreviations for Tables 2, 3 and 4:

kg = Kilograms.

Mcf = millions of cubic feet.

Mgal = millions of gallons.

VOC = Volatile organic compound.

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## **Attachment A**

### **VOC and Chromium Analyses**

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Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TFA</b>													
TFA-I001	07-APR-14	E601	<0.5	<b>0.86</b>	<b>0.64</b>	<0.5	<b>1</b>	<1	<0.5	<b>5.5</b>	<0.5	<b>0.7</b>	<0.5
TFA-I001	02-MAY-14	E601	<0.5	<b>0.82</b>	<b>0.59</b>	<0.5	<b>1</b>	<1	<0.5	<b>5.5</b>	<0.5	<b>0.57</b>	<0.5
TFA-I001	03-JUN-14	E601	<0.5	<b>0.83</b>	<b>0.69</b>	<0.5	<b>1</b>	<1	<0.5	<b>5.6</b>	<0.5	<b>0.58</b>	<0.5
TFA-E001	07-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<b>0.5</b>	<0.5	<0.5	<0.5
TFA-E001	02-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFA-E001	03-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFA-E<sup>a</sup></b>													
STU06-I	19-JUN-14	E624	<1	<1	<1	<1	<1	<1	<1	<b>3.9</b>	<1	<0.5	<1
STU06-E	19-JUN-14	E624	<1	<1	<1	<1	<1	<1	<1	<1	<1	<0.5	<1
<b>TFB</b>													
TFB-I002	03-APR-14	E601	<b>0.52</b>	<b>2.1</b>	<0.5	<0.5	<b>1.2</b>	<1	<b>2.6</b>	<b>0.99</b>	<0.5	<b>9.7</b>	<0.5
TFB-I002	01-MAY-14	E601	<0.5	<b>2</b>	<0.5	<0.5	<b>1.2</b>	<1	<b>2.7</b>	<b>1</b>	<0.5	<b>9.7</b>	<0.5
TFB-I002	02-JUN-14	E601	<0.5	<b>2</b>	<0.5	<0.5	<b>1.2</b>	<1	<b>2.8</b>	<b>1</b>	<0.5	<b>9.9</b>	<0.5
TFB-E002	03-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	01-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFB-E002	02-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFC</b>													
TFC-I003	01-APR-14	E601	<0.5	<b>1.1</b>	<0.5	<0.5	<b>0.79</b>	<1	<b>10</b>	<b>3.8</b>	<0.5	<b>11</b>	<0.5
TFC-I003	01-MAY-14	E601	<0.5	<b>1.1</b>	<0.5	<0.5	<b>0.78</b>	<1	<b>10</b>	<b>3.9</b>	<0.5	<b>11</b>	<0.5
TFC-I003	02-JUN-14	E601	<0.5	<b>1.1</b>	<0.5	<0.5	<b>0.81</b>	<1	<b>10</b>	<b>3.6</b>	<0.5	<b>12</b>	<0.5
TFC-E003	01-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E003	01-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFC-E003	02-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFC-E</b>													
MTU1-I	01-APR-14	E601	<0.5	<b>13</b>	<0.5	<0.5	<b>0.71</b>	<1	<b>7.9</b>	<0.5	<0.5	<b>7</b>	<b>3.3</b>
MTU1-I	01-MAY-14	E601	<0.5	<b>11</b>	<0.5	<0.5	<b>0.64</b>	<1	<b>7.2</b>	<0.5	<0.5	<b>6.1</b>	<b>3</b>
MTU1-I	02-JUN-14	E601	<0.5	<b>11</b>	<0.5	<0.5	<b>0.62</b>	<1	<b>7.5</b>	<0.5	<0.5	<b>6.4</b>	<b>3</b>
MTU1-E	01-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU1-E	01-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU1-E	02-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TFC-SE</b>													
PTU1-I	02-APR-14	E601	<0.5	<b>7.1</b>	<0.5	<0.5	<b>1.6</b>	<1	<b>14</b>	<b>0.65</b>	<0.5	<b>14</b>	<b>1.1</b>
PTU1-I	01-MAY-14	E601	<0.5	<b>6</b>	<0.5	<0.5	<b>3</b>	<1	<b>7.1</b>	<0.5	<0.5	<b>16</b>	<0.5
PTU1-I	02-JUN-14	E601	<0.5	<b>7</b>	<0.5	<0.5	<b>3.2</b>	<1	<b>7.2</b>	<0.5	<0.5	<b>18</b>	<0.5
PTU1-E	02-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU1-E	01-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU1-E	02-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFD</b>													
TFD-I004	07-APR-14	E601	<b>1.9</b>	<b>2.7</b>	<0.5	<0.5	<b>0.96</b>	<1	<b>0.66</b>	<b>1.6</b>	<0.5	<b>47</b>	<b>12</b>
TFD-I004	02-MAY-14	E601	<b>2</b>	<b>2.7</b>	<0.5	<0.5	<b>0.94</b>	<1	<b>0.69</b>	<b>1.7</b>	<0.5	<b>46</b>	<b>12</b>
TFD-I004	03-JUN-14	E601	<b>2</b>	<b>2.6</b>	<0.5	<0.5	<b>0.97</b>	<1	<b>0.69</b>	<b>1.6</b>	<0.5	<b>49</b>	<b>11</b>
TFD-E004	07-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-E004	02-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
TFD-E004	03-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFD-E</b>													
PTU8-I	01-APR-14	E601	<b>3.3</b>	<b>1.2</b>	<0.5	<b>0.64</b>	<b>4</b>	<1	<0.5	<b>3.6</b>	<0.5	<b>76</b>	<b>0.84</b>
PTU8-I	01-MAY-14	E601	<b>3.4</b>	<b>1.1</b>	<0.5	<b>0.55</b>	<b>3.7</b>	<1	<0.5	<b>3.5</b>	<0.5	<b>73</b>	<b>0.71</b>
PTU8-I	02-JUN-14	E601	<b>3.3</b>	<b>1.1</b>	<0.5	<b>0.58</b>	<b>3.7</b>	<1	<0.5	<b>3.4</b>	<0.5	<b>69</b>	<b>0.65</b>
PTU8-E	01-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU8-E	01-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU8-E	02-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFD-HPD</b>													
PTU10-I	14-APR-14	E601	<b>1.4</b>	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>30</b>	<0.5
PTU10-I	07-MAY-14	E601	<b>1.5</b>	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>30</b>	<0.5
PTU10-I	11-JUN-14	E601	<b>1.4</b>	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>31</b>	<0.5
PTU10-E	14-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU10-E	07-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU10-E	11-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFD-S<sup>b</sup></b>													
PTU2-I	01-APR-14	E601	<b>0.91</b>	<b>1.4</b>	<0.5	<0.5	<b>4.4</b>	<1	<b>1.3</b>	<b>6.4</b>	<0.5	<b>52</b>	<0.5
PTU2-I	13-MAY-14	E601	<0.5	<b>1.4</b>	<0.5	<0.5	<b>4.6</b>	<1	<b>1.4</b>	<b>7.6</b>	<0.5	<b>52</b>	<0.5
PTU2-I	14-MAY-14	E601	<0.5	<b>1.4</b>	<0.5	<0.5	<b>4.6</b>	<1	<b>1.4</b>	<b>7.5</b>	<0.5	<b>52</b>	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TFD-S (cont.)</b>													
PTU2-I	15-MAY-14	E601	<b>0.56</b>	<b>2.1</b>	<0.5	<0.5	<b>5</b>	<1	<b>1.7</b>	<b>7.5</b>	<0.5	<b>58</b>	<0.5
PTU2-I	05-JUN-14	E601	<0.5	<b>7.4</b>	<0.5	<0.5	<b>1.5</b>	<1	<b>0.93</b>	<b>4.3</b>	<0.5	<b>38</b>	<0.5
PTU2-E	01-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	15-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU2-E	05-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFD-SE</b>													
PTU11-I	01-APR-14	E601	<b>0.6</b>	<b>3.7</b>	<b>0.64</b>	<b>1.3</b>	<b>8.8</b>	<1	<b>1.1</b>	<b>25</b>	<0.5	<b>92</b>	<0.5
PTU11-I	01-MAY-14	E601	<b>0.57</b>	<b>3.6</b>	<b>0.61</b>	<b>1.2</b>	<b>8.4</b>	<1	<b>1.2</b>	<b>25</b>	<0.5	<b>90</b>	<0.5
PTU11-I	02-JUN-14	E601	<b>0.54</b>	<b>3.5</b>	<b>0.67</b>	<b>1.2</b>	<b>8</b>	<1	<b>1.1</b>	<b>23</b>	<0.5	<b>86</b>	<0.5
PTU11-E	01-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU11-E	01-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU11-E	02-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFD-SS</b>													
PTU12-I	03-APR-14	E601	<b>1.8</b>	<b>2.5</b>	<b>0.59</b>	<b>2</b>	<b>10</b>	<1	<b>0.64</b>	<b>20</b>	<0.5	<b>110</b>	<b>3.3</b>
PTU12-I	07-MAY-14	E601	<b>1.9</b>	<b>2.6</b>	<b>0.58</b>	<b>1.9</b>	<b>10</b>	<1	<b>0.71</b>	<b>21</b>	<0.5	<b>110</b>	<b>3.4</b>
PTU12-I	03-JUN-14	E601	<b>1.9</b>	<b>2.5</b>	<b>0.56</b>	<b>1.9</b>	<b>9.5</b>	<1	<b>0.65</b>	<b>20</b>	<0.5	<b>110</b>	<b>3.2</b>
PTU12-E	03-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU12-E	07-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU12-E	03-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFD-W</b>													
PTU6-I	08-APR-14	E601	<0.5	<b>5.3</b>	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>3.7</b>	<b>33</b>
PTU6-I	07-MAY-14	E601	<0.5	<b>5.2</b>	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>3.6</b>	<b>33</b>
PTU6-I	11-JUN-14	E601	<0.5	<b>5.2</b>	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>3.6</b>	<b>33</b>
PTU6-E	08-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU6-E	07-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU6-E	11-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFE-E</b>													
PTU3-I	01-APR-14	E601	<0.5	<b>2.2</b>	<0.5	<0.5	<b>6.1</b>	<1	<b>5.8</b>	<b>6.1</b>	<0.5	<b>45</b>	<0.5
PTU3-I	01-MAY-14	E601	<0.5	<b>2.2</b>	<0.5	<0.5	<b>5.6</b>	<1	<b>5.6</b>	<b>6.1</b>	<0.5	<b>44</b>	<0.5
PTU3-I	02-JUN-14	E601	<0.5	<b>2.4</b>	<0.5	<0.5	<b>4.7</b>	<1	<b>6</b>	<b>3.7</b>	<0.5	<b>38</b>	<0.5
PTU3-E	01-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TFE-E (cont.)</b>													
PTU3-E	01-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU3-E	02-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFE-HS<sup>c</sup></b>													
W-2105	03-APR-14	E601	<0.5	<b>0.82</b>	<0.5	<0.5	<b>1.8</b>	<b>3.6</b>	<b>4.2</b>	<b>15</b>	<0.5	<b>220</b>	<0.5
GTU07-I	03-APR-14	E601	<0.5	<b>0.72</b>	<0.5	<0.5	<b>1.5</b>	<b>2.6</b>	<b>3.3</b>	<b>12</b>	<0.5	<b>160</b>	<0.5
GTU07-I	08-MAY-14	E601	<0.5	<b>0.62</b>	<0.5	<0.5	<b>1.6</b>	<b>2.5</b>	<b>3</b>	<b>12</b>	<0.5	<b>170</b>	<0.5
GTU07-E	03-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU07-E	08-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFE-NW</b>													
PTU9-I	15-APR-14	E601	<0.5	<b>1.2</b>	<0.5	<0.5	<0.5	<1	<b>1.2</b>	<0.5	<0.5	<b>12</b>	<0.5
PTU9-I	07-MAY-14	E601	<0.5	<b>1.2</b>	<0.5	<0.5	<0.5	<1	<b>1.1</b>	<0.5	<0.5	<b>13</b>	<0.5
PTU9-I	03-JUN-14	E601	<0.5	<b>1.2</b>	<0.5	<0.5	<0.5	<1	<b>1.1</b>	<b>0.51</b>	<0.5	<b>14</b>	<0.5
PTU9-E	15-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU9-E	07-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU9-E	03-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFE-SE</b>													
W-359	03-APR-14	E601	<b>2.7</b>	<b>1.2</b>	<0.5	<0.5	<b>12</b>	<1	<b>5.6</b>	<b>6.4</b>	<0.5	<b>150</b>	<b>0.52</b>
MTU04-I	01-MAY-14	E601	<b>2.8</b>	<b>1.2</b>	<0.5	<0.5	<b>12</b>	<1	<b>5.6</b>	<b>6.7</b>	<0.5	<b>160</b>	<b>0.56</b>
MTU04-I	02-JUN-14	E601	<b>2.5</b>	<b>1.2</b>	<0.5	<0.5	<b>13</b>	<1	<b>5.6</b>	<b>6.5</b>	<0.5	<b>160</b>	<b>0.51</b>
MTU04-E	03-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU04-E	01-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU04-E	02-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFE-SW</b>													
MTU03-I	08-APR-14	E601	<b>1.7</b>	<b>1.5</b>	<0.5	<0.5	<b>0.83</b>	<1	<b>0.64</b>	<b>1.7</b>	<0.5	<b>40</b>	<0.5
MTU03-I	06-MAY-14	E601	<b>1.8</b>	<b>1.5</b>	<0.5	<0.5	<b>0.97</b>	<1	<b>0.73</b>	<b>1.8</b>	<0.5	<b>40</b>	<0.5
MTU03-I	10-JUN-14	E601	<b>1.6</b>	<b>1.5</b>	<0.5	<0.5	<b>0.99</b>	<1	<b>0.71</b>	<b>1.8</b>	<0.5	<b>41</b>	<0.5
MTU03-E	08-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU03-E	06-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU03-E	10-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TFE-W</b>													
MTU05-I	08-APR-14	E601	<0.5	<b>0.98</b>	<0.5	<0.5	<b>1.6</b>	<1	<b>10</b>	<b>6.7</b>	<0.5	<b>26</b>	<0.5
MTU05-I	06-MAY-14	E601	<0.5	<b>0.98</b>	<0.5	<0.5	<b>1.6</b>	<1	<b>9.8</b>	<b>6.7</b>	<0.5	<b>27</b>	<0.5
MTU05-I	10-JUN-14	E601	<0.5	<b>1</b>	<0.5	<0.5	<b>1.6</b>	<1	<b>9.5</b>	<b>6.7</b>	<0.5	<b>28</b>	<0.5
<b>TFG-1</b>													
W-1111	10-APR-14	E601	<b>3.4</b>	<b>9.2</b>	<0.5	<0.5	<b>0.87</b>	<1	<0.5	<b>1.1</b>	<0.5	<b>3.8</b>	<0.5
GTU01-I	07-MAY-14	E601	<b>3.1</b>	<b>9.6</b>	<0.5	<0.5	<b>0.9</b>	<1	<0.5	<b>1</b>	<0.5	<b>3.8</b>	<0.5
GTU01-I	03-JUN-14	E601	<b>2.9</b>	<b>9.8</b>	<0.5	<0.5	<b>0.87</b>	<1	<0.5	<b>1</b>	<0.5	<b>3.8</b>	<0.5
GTU01-E	10-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU01-E	07-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU01-E	03-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TFG-N</b>													
MTU02-I	10-APR-14	E601	<0.5	<b>1.4</b>	<0.5	<0.5	<b>1.4</b>	<1	<b>1.2</b>	<b>17</b>	<0.5	<b>4.6</b>	<0.5
MTU02-I	07-MAY-14	E601	<0.5	<b>1.3</b>	<0.5	<0.5	<b>1.3</b>	<1	<b>1.2</b>	<b>17</b>	<0.5	<b>4.6</b>	<0.5
MTU02-I	03-JUN-14	E601	<0.5	<b>1.3</b>	<0.5	<0.5	<b>1.2</b>	<1	<b>1.2</b>	<b>16</b>	<0.5	<b>4.6</b>	<0.5
MTU02-E	10-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU02-E	07-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
MTU02-E	03-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TF406</b>													
PTU5-I	09-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>3.5</b>	<0.5
PTU5-I	06-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>3.2</b>	<0.5
PTU5-I	10-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>3.1</b>	<0.5
PTU5-E	09-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU5-E	06-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
PTU5-E	10-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TF406-NW</b>													
W-1801	15-APR-14	E601	<0.5	<b>1.1</b>	<0.5	<0.5	<0.5	<1	<b>2.6</b>	<b>0.71</b>	<0.5	<b>16</b>	<0.5
GTU03-I	07-MAY-14	E601	<0.5	<b>1.3</b>	<0.5	<0.5	<0.5	<1	<b>2.8</b>	<b>0.73</b>	<0.5	<b>18</b>	<0.5
GTU03-I	03-JUN-14	E601	<0.5	<b>1.3</b>	<0.5	<0.5	<0.5	<1	<b>2.6</b>	<b>0.74</b>	<0.5	<b>19</b>	<0.5

Table A-1. VOC analyses of influent and effluent samples by treatment facility.

Sample Station	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TF406-NW (cont.)</b>													
GTU03-E	15-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU03-E	07-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU03-E	03-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TF518-N<sup>d</sup></b>													
W-1410	22-APR-14	E601	<b>2</b>	<b>2</b>	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>12</b>	<0.5
<b>TF5475-1<sup>e</sup></b>													
W-1302-2	30-MAY-14	E601	<b>2.3</b>	<b>29</b>	<b>1.3</b>	<b>3.6</b>	<b>19</b>	<1	<b>12</b>	<b>42</b>	<0.5	<b>310</b>	<0.5
<b>TF5475-2<sup>f</sup></b>													
GTU09-I	10-APR-14	E601	<b>1.8</b>	<b>16</b>	<0.5	<b>2.5</b>	<b>14</b>	<1	<b>5.5</b>	<b>32</b>	<0.5	<b>220</b>	<0.5
GTU09-I	01-MAY-14	E601	<b>1.8</b>	<b>16</b>	<0.5	<b>2.4</b>	<b>14</b>	<1	<b>5.5</b>	<b>31</b>	<0.5	<b>230</b>	<0.5
GTU09-E	10-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
GTU09-E	01-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
<b>TF5475-3<sup>g</sup></b>													
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Notes on following page.

**Table A-1. VOC analyses of influent and effluent samples by treatment facility.**

<sup>a</sup> TFA-E did not operate during April and May due to lack of ground water in extraction well W-254 which was the sole source of water for this facility until well W-1214 was connected to STU06 on 6/19/14.

<sup>b</sup> TFD-S testing and verification samples and regulatory samples were collected during the month of May.

<sup>c</sup> TFE-HS was secured on May 20 due to a flowmeter failure and remained offline during the month of June.

<sup>d</sup> TF518-N did not operate during this reporting period due to mixed waste disposition issues.

<sup>e</sup> TF5475-1 did not operate during this reporting period due to mixed waste disposition issues.

<sup>f</sup> TF5475-2 was shutdown on May 11 due to a pump failure at W-1108 and remained offline through the month of June.

<sup>g</sup> TF5475-3 did not operate during this reporting period due to mixed waste disposition issues.

Notes:

CTET = Carbon tetrachloride

CFORM = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TFA</b>													
W-109	17-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<b>1.5</b>	<0.5	<0.5	<0.5
W-262	17-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
W-404	17-APR-14	E601	<0.5	<0.5	<b>0.71</b>	<0.5	<b>0.98</b>	<1	<0.5	<b>4.4</b>	<0.5	<0.5	<0.5
W-408	17-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<b>0.52</b>	<0.5	<0.5	<0.5
W-415	17-APR-14	E601	<0.5	<b>1.5</b>	<b>0.63</b>	<0.5	<b>1.3</b>	<1	<0.5	<b>10</b>	<0.5	<b>0.96</b>	<0.5
W-457	17-APR-14	E601	<0.5	<0.5	<b>0.53</b>	<0.5	<b>0.59</b>	<1	<0.5	<b>4.9</b>	<0.5	<0.5	<0.5
W-518	17-APR-14	E601	<0.5	<0.5	<b>6.6</b>	<0.5	<b>3.3</b>	<1	<0.5	<b>4.5</b>	<0.5	<0.5	<0.5
W-522	17-APR-14	E601	<0.5	<0.5	<b>1.5</b>	<0.5	<b>0.98</b>	<1	<0.5	<b>2.8</b>	<0.5	<0.5	<0.5
W-605	17-APR-14	E601	<0.5	<0.5	<b>0.65</b>	<0.5	<b>0.75</b>	<1	<0.5	<b>11</b>	<0.5	<b>0.55</b>	<0.5
W-614	17-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<b>4.5</b>	<0.5	<0.5	<0.5
W-712	17-APR-14	E601	<b>2.8</b>	<b>2.9</b>	<b>1.1</b>	<0.5	<b>3.5</b>	<1	<0.5	<b>2.1</b>	<0.5	<b>3.1</b>	<0.5
W-714	17-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<b>6.2</b>	<0.5	<0.5	<0.5
W-903	17-APR-14	E601	<0.5	<0.5	<b>0.77</b>	<0.5	<b>0.66</b>	<1	<0.5	<b>4.2</b>	<0.5	<0.5	<0.5
W-904	29-MAY-14	E601	<0.5	<0.5	<b>0.51</b>	<0.5	<b>0.75</b>	<1	<0.5	<b>4.7</b>	<0.5	<0.5	<0.5
W-1001	17-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<0.5	<0.5
W-1004	17-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<b>1.8</b>	<0.5	<0.5	<0.5
W-1009	17-APR-14	E601	<b>1</b>	<b>4.2</b>	<b>0.6</b>	<0.5	<b>2.6</b>	<1	<0.5	<b>10</b>	<0.5	<b>1.7</b>	<0.5
<b>TFA-E</b>													
W-254 <sup>a</sup>	29-APR-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<b>20</b>	<0.5	<b>0.5</b>	<0.5
W-1214	15-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<b>27</b>	<0.5	<b>1.1</b>	<0.5
<b>TFB</b>													
W-357	03-APR-14	E601	<b>1.4</b>	<b>2.9</b>	<0.5	<0.5	<b>1.4</b>	<1	<b>4.2</b>	<b>1.1</b>	<0.5	<b>29</b>	<0.5
W-610	03-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<b>0.71</b>	<1	<b>0.81</b>	<b>0.51</b>	<0.5	<b>1.2</b>	<0.5
W-620	03-APR-14	E601	<0.5	<b>0.76</b>	<0.5	<0.5	<b>0.75</b>	<1	<b>1.2</b>	<b>0.87</b>	<0.5	<b>3</b>	<0.5
W-621	03-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>1.1</b>	<0.5
W-655	03-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<b>5</b>	<0.5	<0.5	<b>0.68</b>	<0.5
W-704	03-APR-14	E601	<b>0.53</b>	<b>3.8</b>	<0.5	<0.5	<b>2</b>	<1	<b>5.7</b>	<b>2.4</b>	<0.5	<b>16</b>	<0.5
W-1423	03-APR-14	E601	<b>0.8</b>	<b>4.4</b>	<0.5	<0.5	<b>2.9</b>	<1	<b>3.1</b>	<b>1.8</b>	<0.5	<b>8.6</b>	<0.5
W-2501	03-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<b>1.1</b>	<0.5	<0.5	<b>4.6</b>	<0.5
W-2502	03-APR-14	E601	<b>0.73</b>	<b>3.4</b>	<0.5	<0.5	<b>1.9</b>	<1	<b>0.52</b>	<0.5	<0.5	<b>2.4</b>	<0.5
<b>TFC</b>													
W-701	01-APR-14	E601	<0.5	<b>1.9</b>	<0.5	<0.5	<b>1.5</b>	<1	<b>23</b>	<b>1.8</b>	<0.5	<b>16</b>	<0.5
W-1015	01-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<b>1.4</b>	<b>0.93</b>	<0.5	<b>3.8</b>	<0.5
W-1102	01-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<b>2.6</b>	<0.5	<0.5	<b>1.2</b>	<0.5
W-1103	01-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	<b>0.77</b>	<0.5
W-1104	01-APR-14	E601	<0.5	<b>0.62</b>	<0.5	<0.5	<0.5	<1	<b>2.6</b>	<b>5</b>	<0.5	<b>8.7</b>	<0.5



Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TFC (cont.)</b>													
W-1116	01-APR-14	E601	<0.5	1	<0.5	<0.5	<0.5	<1	4.9	3.2	<0.5	5.8	<0.5
<b>TFC-E</b>													
W-368	02-JUN-14	E601	<0.5	3.4	<0.5	<0.5	<0.5	<1	17	2.6	<0.5	11	2.3
W-413	02-JUN-14	E601	<0.5	12	<0.5	<0.5	0.78	<1	8.8	<0.5	<0.5	6.8	3.8
<b>TFC-SE</b>													
W-1213	02-APR-14	E601	<0.5	7.9	<0.5	<0.5	1.5	<1	5.3	<0.5	<0.5	9.6	<0.5
W-2201	02-APR-14	E601	<0.5	7.3	<0.5	<0.5	1.7	<1	16	0.78	<0.5	14	1.2
<b>TFD</b>													
W-351	07-APR-14	E601	26	4.2	<0.5	0.86	6.4	<1	4.6	6.5	<0.5	460	1
W-653	07-APR-14	E601	18	5	<0.5	<0.5	0.62	<1	2.5	0.72	<0.5	500	<0.5
W-906	07-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.7	<0.5
W-907-2	07-APR-14	E601	<0.5	3.2	<0.5	<0.5	2.3	<1	1.3	5.1	<0.5	46	<0.5
W-2011	07-APR-14	E601	0.76	0.65	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	16	<0.5
W-2101	07-APR-14	E601	3.6	1.6	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	120	<0.5
W-2102	07-APR-14	E601	13	3.9	<0.5	<0.5	<0.5	<1	1.5	<0.5	<0.5	360	1
W-1206	07-APR-14	E601	0.78	3.8	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	13	<0.5
W-1208	07-APR-14	E601	1.9	1.7	<0.5	<0.5	<0.5	<1	<0.5	0.69	<0.5	38	24
<b>TFD-E</b>													
W-2006	01-MAY-14	E601	1	2	2.8	8.7	89	1.4	<0.5	77	<0.5	470	<0.5
W-1301	01-MAY-14	E601	6.5	2.4	1.6	5.4	44	<1	0.66	34	<0.5	220	<0.5
W-1303	01-MAY-14	E601	3.5	2.1	<0.5	1.6	4.5	<1	<0.5	5.2	<0.5	110	5.5
W-1306	01-MAY-14	E601	1.7	1.3	<0.5	<0.5	<0.5	<1	<0.5	2.1	<0.5	43	<0.5
W-1307	01-MAY-14	E601	3.1	0.67	<0.5	<0.5	<0.5	<1	<0.5	0.75	<0.5	43	<0.5
W-1550	01-MAY-14	E601	6	4.6	<0.5	<0.5	0.55	<1	<0.5	1.9	<0.5	170	<0.5
W-2203	01-MAY-14	E601	9.3	2.4	<0.5	<0.5	1.8	<1	1.8	5.8	<0.5	100	<0.5
<b>TFD-HPD</b>													
W-1254	14-APR-14	E601	1.4	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	30	<0.5
W-1650	29-MAY-14	E601	1.7	1.8	<0.5	<0.5	<0.5	3	0.74	<0.5	<0.5	130	<0.5
W-1653	29-MAY-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	30	<0.5	<0.5	<0.5	14	<0.5
W-1655	29-MAY-14	E601	<0.5	0.92	<0.5	<0.5	<0.5	<1	<0.5	1	<0.5	34	<0.5
W-1657	29-MAY-14	E601	7.3	3.7	<0.5	<0.5	<0.5	<1	2.2	<0.5	<0.5	830	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TFD-S</b>													
W-1503	16-JUN-14	E601	1.1	1.2	<0.5	<0.5	0.72	<1	<0.5	1.1	<0.5	28	<0.5
W-1504	01-APR-14	E601	<0.5	0.99	<0.5	<0.5	8	1.1	2.2	12	<0.5	63	<0.5
W-1510 <sup>a</sup>	02-JAN-14	E601	<0.5	1.8	<0.5	<0.5	3.4	<1	0.53	5	<0.5	41	<0.5
W-2601	02-JUN-14	E601	0.5	7.6	<0.5	<0.5	2.3	<1	1.5	5.4	<0.5	57	<0.5
<b>TFD-SE</b>													
W-314	01-MAY-14	E601	<0.5	2.1	0.5	<0.5	2.7	<1	0.78	5.3	<0.5	39	<0.5
W-2005	01-MAY-14	E601	<0.5	0.58	<0.5	0.55	7.8	<1	<0.5	20	<0.5	38	<0.5
W-1308	01-MAY-14	E601	<0.5	1.3	0.77	2.3	13	<1	<0.5	58	<0.5	89	<0.5
W-1403	01-MAY-14	E601	2.1	16	1.2	4.6	35	<1	3.8	84	<0.5	320	<0.5
W-1904	02-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	1.4	<1	<0.5	13	<0.5	6	<0.5
SIP-ETC-201 <sup>a</sup>	05-FEB-14	E601	<0.5	0.58	2	0.83	61	<1	<0.5	330	<0.5	190	<0.5
<b>TFD-SS</b>													
W-1523	03-APR-14	E601	3.5	3.8	<0.5	1.6	11	<1	1.6	19	<0.5	130	<0.5
W-1601	03-APR-14	E601	3.2	3.4	1.1	4.6	20	<1	1.1	76	<0.5	210	<0.5
W-1602	03-APR-14	E601	<0.5	1.2	<0.5	<0.5	<0.5	<1	<0.5	1.2	<0.5	9.3	1.4
W-1603	03-APR-14	E601	1.1	1.9	0.79	2.5	11	<1	<0.5	20	<0.5	120	6.2
<b>TFD-W</b>													
W-1215	08-APR-14	E601	<0.5	8.7	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4.2	17
W-1216	08-APR-14	E601	<0.5	4.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	2.2	22
W-1902	08-APR-14	E601	0.5	3.4	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	4.6	50
<b>TFE-E</b>													
W-566	01-APR-14	E601	<0.5	2.6	<0.5	<0.5	4.5	<1	6.4	3.2	<0.5	37	<0.5
W-1109	01-APR-14	E601	<0.5	<0.5	<0.5	<0.5	19	<1	3.8	36	<0.5	120	<0.5
W-1903	01-APR-14	E601	<0.5	<0.5	<0.5	<0.5	14	<1	4.1	13	<0.5	28	<0.5
W-1909 <sup>a</sup>	14-NOV-11	E601	<0.5	<0.5	<0.5	<0.5	9.1	1.1	<0.5	5.4	<0.5	6.5	<0.5
W-2305	24-JUN-14	E601	<0.5	<0.5	<0.5	<0.5	21	<1	7.6	27	<0.5	45	<0.5
<b>TFE-HS</b>													
W-2105	03-APR-14	E601	<0.5	0.82	<0.5	<0.5	1.8	3.6	4.2	15	<0.5	220	<0.5
<b>TFE-NW</b>													
W-1211	15-APR-14	E601	<0.5	1.4	<0.5	<0.5	<0.5	<1	1.4	<0.5	<0.5	7.6	<0.5
W-1409	15-APR-14	E601	<0.5	<0.5	<0.5	<0.5	0.63	<1	0.5	1.5	<0.5	29	<0.5

Table A-2. VOC analyses of samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TFE-SE</b>													
W-359	03-APR-14	E601	2.7	1.2	<0.5	<0.5	12	<1	5.6	6.4	<0.5	150	0.52
<b>TFE-SW</b>													
W-1516	08-APR-14	E601	0.5	0.97	<0.5	<0.5	<0.5	<1	0.69	<0.5	<0.5	8.5	<0.5
W-1518	08-APR-14	E601	<0.5	<0.5	<0.5	<0.5	1.3	1	2.2	0.82	<0.5	9.5	<0.5
W-1520	08-APR-14	E601	6.7	4	<0.5	2	1.4	1.2	<0.5	7.9	<0.5	150	<0.5
W-1522	08-APR-14	E601	10	5.2	<0.5	1.5	5.5	6.4	0.66	7.2	<0.5	190	<0.5
<b>TFE-W</b>													
W-292	08-APR-14	E601	<0.5	0.77	<0.5	<0.5	0.92	2	1.3	1.3	<0.5	18	<0.5
W-305	08-APR-14	E601	<0.5	1.1	<0.5	<0.5	1.9	<1	14	9.4	<0.5	30	0.56
<b>TFG-1</b>													
W-1111	10-APR-14	E601	3.4	9.2	<0.5	<0.5	0.87	<1	<0.5	1.1	<0.5	3.8	<0.5
<b>TFG-N</b>													
W-1806	10-APR-14	E601	<0.5	0.78	<0.5	<0.5	0.51	<1	<0.5	9.2	<0.5	2.4	<0.5
W-1807	10-APR-14	E601	<0.5	1.5	<0.5	<0.5	1.5	<1	1.3	17	<0.5	5	<0.5
<b>TF406</b>													
W-1309	09-APR-14	E601	0.54	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	2.4	<0.5
W-1310	09-APR-14	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	3.5	<0.5
<b>TF406-NW</b>													
W-1801	15-APR-14	E601	<0.5	1.1	<0.5	<0.5	<0.5	<1	2.6	0.71	<0.5	16	<0.5
<b>TF518-N<sup>b</sup></b>													
W-1410	22-APR-14	E601	2	2	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.5	12	<0.5
<b>TF518-PZ</b>													
W-1615	14-APR-14	E601	<0.5	<0.5	<0.5	<0.5	2.4	<1	<0.5	31	<0.5	140	<0.5
W-518-1913 <sup>a</sup>	23-MAY-11	E601	<0.5	<0.5	<0.5	<0.5	0.76	<1	<0.5	3.8	<0.5	29	<0.5
W-518-1914 <sup>a</sup>	17-JAN-13	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	44	<0.5	3.6	<0.5
W-518-1915	14-APR-14	E601	<0.5	1	<0.5	<0.5	5.1	<1	<0.5	73	<0.5	530	<0.5
SVB-518-201 <sup>a</sup>	07-FEB-08	E601	<0.5	<0.5	<0.5	<0.5	<0.5	<1	<0.5	35	<0.5	8.5	<0.5
SVB-518-204 <sup>a</sup>	07-FEB-08	E601	<0.5	0.63	<0.5	<0.5	1.4	<1	<0.5	43	<0.5	550	<0.5

**Table A-2. VOC analyses of samples from treatment facility extraction wells.**

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE ug/L (ppb)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>TF5475-1<sup>b</sup></b>													
W-1302-2	30-MAY-14	E601	<b>2.3</b>	<b>29</b>	<b>1.3</b>	<b>3.6</b>	<b>19</b>	<1	<b>12</b>	<b>42</b>	<0.5	<b>310</b>	<0.5
<b>TF5475-2</b>													
W-1108 <sup>a</sup>	02-JAN-14	E601	<b>1.7</b>	<b>18</b>	<b>0.51</b>	<b>2.6</b>	<b>15</b>	<1	<b>4.8</b>	<b>30</b>	<0.5	<b>240</b>	<0.5
W-1415 <sup>a</sup>	15-OCT-12	E601	<0.5	<b>6.5</b>	<0.5	<0.5	<b>3</b>	<b>7.2</b>	<0.5	<b>5.8</b>	<0.5	<b>47</b>	<0.5
<b>TF5475-3<sup>b</sup></b>													
W-1604 <sup>ac</sup>	04-MAR-14	E601	<b>3.4</b>	<b>58</b>	<b>1.5</b>	<b>17</b>	<b>25</b>	<b>3.5</b>	<b>7.7</b>	<b>78</b>	<1	<b>780</b>	<1
W-1605	28-APR-14	E601	<0.5	<b>8</b>	<0.5	<b>1.1</b>	<0.5	<1	<0.5	<b>1.6</b>	<0.5	<b>16</b>	<0.5
W-1608	28-APR-14	E601	<0.5	<b>2.9</b>	<0.5	<b>0.62</b>	<0.5	<1	<0.5	<0.5	<0.5	<b>7</b>	<0.5
W-1609	28-APR-14	E601	<0.5	<b>37</b>	<b>0.66</b>	<b>2.8</b>	<b>5.4</b>	<1	<b>0.71</b>	<b>14</b>	<0.5	<b>110</b>	<0.5

Notes on following page.

**Table A-2. VOC analyses of samples from treatment facility extraction wells.**

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<sup>a</sup> Most recent VOC sample results available.

<sup>b</sup> Treatment Facility did not operate during reporting period. Please refer to Table A-1 for details.

<sup>c</sup> Elevated detection limit due to dilution.

Notes:

CTET = Carbon tetrachloride

CFORM = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE PPM(V/V)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>VTFD-ETCS</b>													
W-1904	15-APR-14	TO15DIT	<0.005	<0.005	<0.005	<0.005	<b>0.0068</b>	<0.005	<0.005	<b>0.15</b>	<0.005	<b>0.051</b>	<0.005
W-ETC-2003	15-APR-14	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.059</b>	<0.005	<b>0.028</b>	<0.005
W-ETC-2004A	15-APR-14	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.17</b>	<0.005	<b>0.056</b>	<0.005
W-ETC-2004B	15-APR-14	TO15DIT	<0.005	<b>0.0098</b>	<0.005	<0.005	<b>0.064</b>	<0.005	<0.005	<b>0.36</b>	<0.005	<b>1.1</b>	<0.005
SIP-ETC-201	15-APR-14	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
<b>VTFE-ELM</b>													
W-1903	05-MAY-14	TO15DIT	<0.005	<0.005	<0.005	<0.005	<b>0.53</b>	<0.005	<b>0.14</b>	<b>0.46</b>	<0.005	<b>1.1</b>	<0.005
W-1909 <sup>a</sup>	06-OCT-11	TO15DIT	<0.005	<b>0.034</b>	<0.005	<0.005	<b>0.51</b>	<0.005	<b>0.054</b>	<b>0.88</b>	<0.005	<b>1.2</b>	<0.005
W-2305 <sup>a</sup>	06-OCT-11	TO15DIT	<0.005	<0.005	<0.005	<0.005	<b>0.2</b>	<0.005	<b>0.036</b>	<b>0.46</b>	<0.005	<b>0.55</b>	<0.005
W-543-001	05-MAY-14	TO15DIT	<0.005	<0.005	<0.005	<0.005	<b>0.0091</b>	<0.005	<0.005	<b>0.3</b>	<0.005	<b>0.083</b>	<0.005
W-543-003	05-MAY-14	TO15DIT	<0.005	<b>0.025</b>	<0.005	<0.005	<b>0.058</b>	<0.005	<b>0.019</b>	<b>0.15</b>	<0.005	<b>0.39</b>	<0.005
W-543-1908	05-MAY-14	TO15DIT	<0.005	<0.005	<0.005	<0.005	<b>0.005</b>	<0.005	<0.005	<b>0.018</b>	<0.005	<b>0.081</b>	<0.005
<b>VTFE-HS</b>													
W-2105	16-APR-14	TO15DIT	<0.005	<0.005	<0.005	<0.005	<b>0.013</b>	<0.005	<b>0.12</b>	<b>0.15</b>	<0.005	<b>1.6</b>	<0.005
W-ETS-2008A	16-APR-14	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.006</b>	<0.005	<b>0.0078</b>	<0.005
W-ETS-2008B	16-APR-14	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.01</b>	<b>0.22</b>	<0.005	<b>0.35</b>	<0.005
W-ETS-2009	16-APR-14	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.072</b>	<0.005	<b>0.21</b>	<0.005
W-ETS-2010A	16-APR-14	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.14</b>	<0.005	<b>0.099</b>	<0.005
W-ETS-2010B	16-APR-14	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.048</b>	<0.005	<b>0.11</b>	<0.005
<b>VTF406-HS</b>													
W-217	15-APR-14	TO15DIT	<b>0.098</b>	<b>0.035</b>	<b>0.007</b>	<0.005	<b>0.52</b>	<b>0.016</b>	<b>0.13</b>	<b>0.48</b>	<0.005	<b>1.8</b>	<b>0.0068</b>
W-514-2007A	15-APR-14	TO15DIT	<b>0.092</b>	<0.005	<0.005	<0.005	<b>0.044</b>	<0.005	<b>0.19</b>	<b>0.072</b>	<0.005	<b>0.39</b>	<b>4.2</b>
W-514-2007B	15-APR-14	TO15DIT	<b>0.053</b>	<b>0.023</b>	<0.005	<0.005	<b>0.26</b>	<0.005	<b>0.046</b>	<b>0.19</b>	<0.005	<b>0.86</b>	<b>0.028</b>
<b>VTF511</b>													
W-2204	19-MAY-14	TO15DIT	<b>0.092</b>	<b>0.03</b>	<0.01	<b>0.026</b>	<b>0.023</b>	<0.01	<0.01	<b>0.66</b>	<0.01	<b>6.3</b>	<0.01
W-2205	19-MAY-14	TO15DIT	<b>0.063</b>	<0.01	<0.01	<0.01	<b>0.028</b>	<0.01	<0.01	<b>0.14</b>	<0.01	<b>1.9</b>	<0.01
W-2206	19-MAY-14	TO15DIT	<0.01	<0.01	<0.01	<b>0.015</b>	<0.01	<0.01	<0.01	<b>0.15</b>	<0.01	<b>1.1</b>	<0.01
W-2207A	19-MAY-14	TO15DIT	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<b>0.014</b>	<0.01	<b>0.32</b>	<0.01
W-2207B	19-MAY-14	TO15DIT	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<b>0.015</b>	<0.01	<b>0.99</b>	<0.01
W-2208A	19-MAY-14	TO15DIT	<b>0.029</b>	<b>0.016</b>	<0.01	<0.01	<b>0.03</b>	<0.01	<0.01	<b>0.028</b>	<0.01	<b>3.9</b>	<b>0.035</b>
W-2208B	19-MAY-14	TO15DIT	<b>0.1</b>	<b>0.081</b>	<b>0.061</b>	<b>0.032</b>	<b>0.59</b>	<b>0.17</b>	<b>0.092</b>	<b>0.36</b>	<0.02	<b>13</b>	<b>0.12</b>
<b>VTF518-PZ</b>													
W-1615	14-APR-14	TO15DIT	<b>0.0062</b>	<0.005	<0.005	<0.005	<b>0.21</b>	<0.005	<b>0.051</b>	<b>1.5</b>	<0.005	<b>4.6</b>	<0.005
W-518-1913	14-APR-14	TO15DIT	<0.005	<0.005	<0.005	<0.005	<b>0.071</b>	<0.005	<0.005	<b>0.16</b>	<0.005	<b>1.1</b>	<0.005

Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.

Extraction Well	Date Sampled	Analytic Method	CTET <-	CFORM -	1,1-DCA -	1,2-DCA -	1,1-DCE PPM(V/V)	1,2-DCE -	Freon 113 -	PCE -	1,1,1-TCA -	TCE -	Freon 11 ->
<b>VTF518-PZ (cont.)</b>													
W-518-1914	14-APR-14	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<b>2.2</b>	<0.005	<b>0.2</b>	<0.005
W-518-1915	14-APR-14	TO15DIT	<0.005	<0.005	<0.005	<0.005	<b>0.014</b>	<0.005	<0.005	<b>3.4</b>	<0.005	<b>1.1</b>	<0.005
SVB-518-201	14-APR-14	TO15DIT	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.011</b>	<0.005	<b>0.016</b>	<0.005
SVB-518-204	14-APR-14	TO15DIT	<0.005	<0.005	<0.005	<0.005	<b>0.0072</b>	<0.005	<0.005	<b>0.081</b>	<0.005	<b>0.71</b>	<0.005
<b>VTF5475<sup>b</sup></b>													
W-1605	02-JUN-14	TO15DIT	<0.005	<b>0.15</b>	<0.005	<b>0.0095</b>	<b>0.11</b>	<0.005	<b>0.024</b>	<b>0.046</b>	<0.005	<b>0.57</b>	<0.005
W-1608	02-JUN-14	TO15DIT	<0.005	<b>0.049</b>	<0.005	<0.005	<b>0.028</b>	<0.005	<b>0.016</b>	<b>0.021</b>	<0.005	<b>0.18</b>	<0.005
W-2211	03-JUN-14	TO15DIT	<0.005	<b>0.017</b>	<0.005	<0.005	<b>0.0076</b>	<0.005	<0.005	<b>0.0056</b>	<0.005	<b>0.051</b>	<0.005
W-2212	09-JUN-14	TO15DIT	<b>0.0073</b>	<b>0.14</b>	<b>0.0057</b>	<b>0.01</b>	<b>0.19</b>	<0.005	<b>0.04</b>	<b>0.056</b>	<0.005	<b>0.49</b>	<0.005
W-ETS-507	03-JUN-14	TO15DIT	<0.005	<b>0.54</b>	<0.005	<b>0.0069</b>	<0.005	<0.005	<0.005	<b>0.09</b>	<0.005	<b>0.37</b>	<0.005
W-2302	03-JUN-14	TO15DIT	<0.005	<b>0.0076</b>	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.005</b>	<0.005	<b>0.047</b>	<0.005
W-2303	03-JUN-14	TO15DIT	<0.005	<b>0.0065</b>	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.014</b>	<0.005
SVI-ETS-504	03-JUN-14	TO15DIT	<0.005	<b>0.019</b>	<0.005	<0.005	<0.005	<0.005	<0.005	<b>0.0077</b>	<0.005	<b>0.041</b>	<0.005

Notes on following page.

**Table A-3. VOC analyses of vapor samples from treatment facility extraction wells.**

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<sup>a</sup> Most recent VOC vapor sample results available.

<sup>b</sup> VTF5475 did not operate during reporting period due to mixed waste disposition issues.

Notes:

CTET = Carbon tetrachloride

CFORM = Chloroform

1,1-DCA = 1,1-Dichloroethane

1,2-DCA = 1,2-Dichloroethane

1,1-DCE = 1,1-Dichloroethylene

1,2-DCE = 1,2-Dichloroethylene

Freon 113 = Trichlorotrifluoroethane

PCE = Tetrachloroethylene

1,1,1-TCA = 1,1,1-Trichloroethane

TCE = Trichloroethene

Freon 11 = Trichlorofluoromethane

VOC = volatile organic compound

Numbers in **BOLD** print indicate positive values above the detection limit.



**Table A-4. Chromium analyses of influent, effluent and receiving water samples by treatment facility.**

<b>Treatment Facility</b>	<b>Sample Station</b>	<b>Date Sampled</b>	<b>Chromium (total)<sup>a</sup> mg/L (ppm)</b>	<b>Hexavalent Chromium mg/L (ppm)</b>
<b>TFA-E</b>	STU06-I	19-JUN-14	0.005	NA
	STU06-E	19-JUN-14	0.0051	<0.005
<b>TFB</b>	TFB-E002	03-APR-14	0.02	NA
	TFB-E002	01-MAY-14	0.021	NA
	TFB-E002	02-JUN-14	0.021	NA
<b>TFC</b>	TFC-E003	01-APR-14	0.022	NA
	TFC-E003	01-MAY-14	0.023	NA
	TFC-E003	02-JUN-14	0.024	NA
<b>TFC-E</b>	MTU1-E	01-APR-14	0.022	NA
	MTU1-E	01-MAY-14	0.042	NA
	MTU1-E	02-JUN-14	0.041	NA
<b>TFC-SE</b>	PTU1-E	02-APR-14	0.033	NA
	PTU1-E	01-MAY-14	0.035	NA
	PTU1-E	02-JUN-14	0.034	NA

<sup>a</sup>A discharge limit of 0.050 ppm is set for total chromium during the dry season (April 1-November 30), and no limit is set for total chromium for the wet season (December 1-March 31); however, a limit of 0.022 ppm hexavalent chromium applies during the wet season. Discharge limits are defined in the Explanation of Significant Differences for metals discharge limits (April 1997).

Shaded values exceeded the discharge limit. See text for explanation.

## Explanation of Abbreviations

TFA-I001 is a sampling port located immediately prior to the TFA Treatment System.

TFA-E001 is a sampling port located immediately after the TFA Treatment System, at the beginning of the discharge pipeline.

TFA receiving water is routinely sampled at the TFG-ASW location.

TFB-I002 is a sampling port located immediately prior to the TFB Treatment System.

TFB-E002 is a sampling port located immediately after the TFB Treatment System, at the beginning of the discharge pipeline.

TFB-R002 is a sampling station in the drainage ditch north of TFB, located approximately 75 ft downstream from the discharge point.

TFC-I003 is a sampling port located immediately prior to the TFC Treatment System.

TFC-E003 is a sampling port located immediately after the TFC Treatment System, at the beginning of the discharge pipeline.

TFC-R003 is a sampling station in Arroyo Las Positas, located approximately 75 ft downstream from the TFC discharge point.

TFD-I004 is a sampling port located immediately prior to the TFD Treatment System.

TFD-E004 is a sampling port located immediately after the TFD Treatment System, prior to discharge to the Lake Haussmann or to the underground discharge pipeline leading to Arroyo Las Positas.

TFD-R004 is now combined with and collected at the TFC-R003 location. Results are reported under TFC-R003, as approved by the RWQCB.

CRD1-I is a sampling port located immediately prior to the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1).

CRD1-E is the effluent from the catalytic column in the Catalytic Reductive Dehalogenation treatment unit 1 (CRD1) and then reinjected at W-1302.

CRD2-I is a sampling port located immediately prior to the catalytic columns in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2).

CRD2-E is the effluent from the last catalytic column in the Catalytic Reductive Dehalogenation treatment unit 2 (CRD2) and then reinjected at W-1610.

GTU01-I is a sampling port located immediately prior to GTU01, which is currently operating in the TFG-1 area.

GTU01-E is a sampling port located immediately after GTU01, which is currently operating in the TFG-1 area.

GTU01 receiving water is routinely sampled at the TFG-ASW location.

GTU03-I is a sampling port located immediately prior to GTU03, which is currently operating in the TF406 Northwest area.

GTU03-E is a sampling port located immediately after GTU03, which is currently operating in the TF406 Northwest area.

GTU03 receiving water is routinely sampled at the TFC-R003 location.

GTU07-I is a sampling port located immediately prior to GTU07, which is currently operating in the TFE Hotspot area.

GTU07-E is a sampling port located immediately after GTU07, which is currently operating in the TFE Hotspot area.

GTU07 receiving water is routinely sampled at the TFC-R003 location.

GTU09-I is a sampling port located immediately prior to GTU09, which is currently operating in the TF5475 area.

GTU09-E is a sampling port located immediately after GTU09, which is currently operating in the TF5475 area.

GTU09 receiving water is routinely sampled at the TFC-R003 location.

MTU02-I is a sampling port located immediately prior to MTU02, which is currently operating in the TFG North area.

MTU02-E is a sampling port located immediately after MTU02, which is currently operating in the TFG North area.

MTU02 receiving water is routinely sampled at the TFC-R003 location.

MTU03-I is a sampling port located immediately prior to MTU03, which is currently operating in the TFE Southwest area.

MTU03-E is a sampling port located immediately after MTU03, which is currently operating in the TFE Southwest area.

MTU03 receiving water is routinely sampled at the TFC-R003 location.

MTU04-I is a sampling port located immediately prior to MTU04, which is currently operating in the TFE Southeast area.

MTU04-E is a sampling port located immediately after MTU04, which is currently operating in the TFE Southeast area.

MTU04 receiving water is routinely sampled at the TFC-R003 location.

MTU05-I is a sampling port located immediately prior to MTU05, which is currently operating in the TFE West area.

MTU05-E is a sampling port located immediately after MTU05, which is currently operating in the TFE West area.

MTU05 receiving water is routinely sampled at the TFC-R003 location.

MTU1-I is a sampling port located immediately prior to MTU1, which is currently operating in the TFC East area.

MTU1-E is a sampling port located immediately after MTU1, which is currently operating in the TFC East area.

## Explanation of Abbreviations

MTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU1-I is a sampling port located immediately prior to PTU-1, which is currently operating in the TFC Southeast area.

PTU1-E is a sampling port located immediately after PTU-1, which is currently operating in the TFC Southeast area.

PTU1 receiving water is routinely sampled at the TFC-R003 location.

PTU2-I is a sampling port located immediately prior to PTU-2, which is currently operating in the TFD South area.

PTU2-E is a sampling port located immediately after PTU-2, which is currently operating in the TFD South area.

PTU2 receiving water is routinely sampled at TFC-R003 during the wet season.

PTU3-I is a sampling port located immediately prior to PTU-3, which is currently operating in the TFE East area.

PTU3-E is a sampling port located immediately after PTU-3, which is currently operating in the TFE East area.

PTU3 receiving water is routinely sampled at the TFC-R003 location.

PTU5-I is a sampling port located immediately prior to PTU-5, which is currently operating in the TF406 extraction location.

PTU5-E is a sampling port located immediately after PTU-5, which is currently operating in the TF406 extraction location.

PTU5 receiving water is routinely sampled at the TFC-R003 location.

PTU6-I is a sampling port located immediately prior to PTU-6, which is currently operating in the TFD West area.

PTU6-E is a sampling port located immediately after PTU-6, which is currently operating in the TFD West area.

PTU6 receiving water is routinely sampled at the TFC-R003 location.

PTU8-I is a sampling port located immediately prior to PTU-8, which is currently operating in the TFD East area.

PTU8-E is a sampling port located immediately after PTU-8, which is currently operating in the TFD East area.

PTU8 receiving water is routinely sampled at the TFC-R003 location.

PTU9-I is a sampling port located immediately prior to PTU-9, which is currently operating in the TFE Northwest area.

PTU9-E is a sampling port located immediately after PTU-9, which is currently operating in the TFE Northwest area.

PTU9 receiving water is routinely sampled at the TFC-R003 location.

PTU10-I is a sampling port located immediately prior to PTU-10, which is currently operating in the TFD Helipad area.

PTU10-E is a sampling port located immediately after PTU-10, which is currently operating in the TFD Helipad area.

PTU10 receiving water is routinely sampled at the TFC-R003 location.

PTU11-I is a sampling port located immediately prior to PTU-11, which is currently operating in the TFD Southeast area.

PTU11-E is a sampling port located immediately after PTU-11, which is currently operating in the TFD Southeast area.

PTU11 receiving water is routinely sampled at the TFC-R003 location.

PTU12-I is a sampling port located immediately prior to PTU-12, which is currently operating in the TFD Southshore area.

PTU12-E is a sampling port located immediately after PTU-12, which is currently operating in the TFD Southshore area.

PTU12 receiving water is routinely sampled at the TFC-R003 location.

STU06-I is a sampling port located immediately prior to STU06, which is operating in the TFA East area.

STU06-E is a sampling port located immediately after STU06, which is operating in the TFA East area.

STU06 receiving water is routinely sampled at the TFG-ASW location.

STU09-I is a sampling port located immediately prior to STU09, which is currently operating in the TF518-North area.

STU09-E is a sampling port located immediately after STU09, which is currently operating in the TF518-North area.

STU09 receiving water is routinely sampled at the TFC-R003 location.

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**Attachment B**

**Self-Monitoring Reports**

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# Self-Monitoring Report LLNL Treatment Facility A (TFA) AREA TFA

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 710

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u><b>04-07-2014</b></u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18.7</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-109	1,155,904	27.4
W-262	160	0.0
W-404	1,232,614	31.9
W-408	460,376	10.9
W-415	1,635,424	39.9
W-457	411,904	9.2
W-518	181,354	4.3
W-522	621,432	15.8
W-605	372,392	8.8
W-614	457,048	10.9
W-712	270,548	6.4
W-714	326,864	8.4
W-903	630,160	14.6
W-904	0	0.0
W-1001	86,574	1.9
W-1004	439,344	10.7
W-1009	952,112	22.6
<hr/>		
Total:	<u>9,234,210</u>	<u>223.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>4,372,110</u>

**Self-Monitoring Report (cont'd)**  
**LLNL Treatment Facility A (TFA)**  
**AREA TFA**

Arroyo Seco

TFG-ASW

4,862,100

6. Comments:

Facility was shutdown on 04-01-2014 due to W-408 leak fault. Facility was restarted on 04-02-2014.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: \_\_\_\_\_

*Steve Lawrence*

Date: 05-01-2014

# Self-Monitoring Report

## LLNL Treatment Facility A (TFA)

### AREA TFA

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 713

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-01-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-109	207,840	27.4
W-262	0	0.0
W-404	1,272,390	31.7
W-408	435,867	10.8
W-415	1,640,560	39.1
W-457	360,328	9.6
W-518	184,394	4.3
W-522	584,192	13.6
W-605	375,132	8.9
W-614	462,076	11.0
W-712	270,264	6.3
W-714	313,400	8.4
W-903	587,736	14.0
W-904	614,578	30.0
W-1001	82,162	2.1
W-1004	443,112	10.8
W-1009	957,024	22.5
Total:	<u>8,791,055</u>	<u>250.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>4,625,098</u>

**Self-Monitoring Report (cont'd)**  
**LLNL Treatment Facility A (TFA)**  
**AREA TFA**

Arroyo Seco

TFG-ASW

4,165,957

6. Comments:

Facility was shutdown on 05-19-2014 due to I/O fault. Facility was restarted on 05-20-2014. Secured W-109 on 5-5-14. Secured W-408, W-903, and W-404 on 5-6-14. Restarted W-408, W-903, and W-404 on 5-8-14. Started W-904 on 5-15-14.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: \_\_\_\_\_

*Shirley Kawaguchi*

Date: 06-11-2014



# Self-Monitoring Report

## LLNL Treatment Facility A (TFA)

### AREA TFA

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u><b>31</b></u>																
June	<u><b>01</b></u>	<u><b>02</b></u>	<u><b>03</b></u>	<u><b>04</b></u>	<u><b>05</b></u>	<u><b>06</b></u>	<u><b>07</b></u>	<u><b>08</b></u>	<u><b>09</b></u>	<u><b>10</b></u>	<u><b>11</b></u>	<u><b>12</b></u>	<u><b>13</b></u>	<u><b>14</b></u>	<u><b>15</b></u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>		

Total monthly time facility operated (hours): 743

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u><b>05-31-2014</b></u>
Influent pH:	<u><b>7.5</b></u>
Effluent pH:	<u><b>7.5</b></u>
Effluent Temperature (°C):	<u><b>19.1</b></u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-109	0	0.0
W-262	0	0.0
W-404	1,422,290	31.9
W-408	476,757	10.6
W-415	1,730,944	37.6
W-457	401,616	8.5
W-605	390,360	8.7
W-518	192,972	4.3
W-522	586,168	14.0
W-614	486,176	10.9
W-1001	74,672	1.4
W-1004	313,992	10.5
W-1009	1,013,696	22.5
W-712	275,404	6.3
W-714	322,420	7.2
W-903	627,528	13.7
W-904	1,240,414	33.1
Total:	<u><b>9,555,409</b></u>	<u><b>221.2</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>West Perimeter Drainage Channel</b></u>	<u><b>TFB-R002</b></u>	<u><b>5,064,710</b></u>

**Self-Monitoring Report (cont'd)**  
**LLNL Treatment Facility A (TFA)**  
**AREA TFA**

Arroyo Seco

TFG-ASW

4,490,699

6. Comments:

W-1004 down on 6-20-14 due to flow meter failure.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:

Steve Kavanagh

Date: 07-03-2014

**Self-Monitoring Report**  
**LLNL Solar Treatment Unit 06 (STU06)**  
**AREA TFA-E**

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

March	31														
April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-254</b>	<b>0</b>	<b>0.0</b>
Total:	<u><b>0</b></u>	<u><b>0.0</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<b><u>Arroyo Seco</u></b>	<b><u>TFG-ASW</u></b>	<b><u>0</u></b>

6. Comments:

Facility secured due to lack of water in extraction well.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kaurzen G. Date: **04-30-2014**

**Self-Monitoring Report**  
**LLNL Solar Treatment Unit 06 (STU06)**  
**AREA TFA-E**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April	30														
May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-254</b>	<b>0</b>	<b>0.0</b>
Total:	<u><b>0</b></u>	<u><b>0.0</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Seco</b></u>	<u><b>TFG-ASW</b></u>	<u><b>0</b></u>

6. Comments:

Facility secured due to lack of water in extraction well.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaguchi Date: 05-30-2014

**Self-Monitoring Report**  
**LLNL Solar Treatment Unit 06 (STU06)**  
**AREA TFA-E**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	30	31																	
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>				

Total monthly time facility operated (hours): 272

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-19-2014</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20.1</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-254</b>	<b>0</b>	<b>0.0</b>
<b>W-1214</b>	<b>10,154</b>	<b>0.7</b>
Total:	<u><b>10,154</b></u>	<u><b>0.7</b></u>

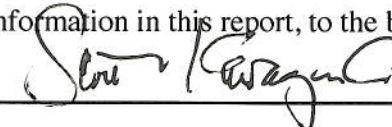
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Seco</b></u>	<u><b>TFG-ASW</b></u>	<u><b>10,154</b></u>

6. Comments:

Started system on 6-19-14. Running W-1214 only.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-03-2014

# Self-Monitoring Report LLNL Treatment Facility B (TFB) AREA TFB

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April      **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**  
              **16** **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): **731**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **04-03-2014**  
 Influent pH: **7.5**  
 Effluent pH: **7.5**  
 Effluent Temperature (°C): **20.3**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	<b>361,760</b>	<b>8.3</b>
W-610	<b>291,352</b>	<b>6.9</b>
W-620	<b>232,492</b>	<b>5.6</b>
W-621	<b>124</b>	<b>0.0</b>
W-655	<b>110</b>	<b>0.0</b>
W-704	<b>750,152</b>	<b>17.4</b>
W-1423	<b>167,604</b>	<b>3.9</b>
W-2501	<b>578,165</b>	<b>15.7</b>
W-2502	<b>282,149</b>	<b>6.8</b>
Total:	<u><b>2,663,908</b></u>	<u><b>64.6</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>West Perimeter Drainage Channel</b></u>	<u><b>TFB-R002</b></u>	<u><b>1,890,541</b></u>
<u><b>Building 133 Cooling Tower</b></u>	<u><b>TFB-E-B133CT</b></u>	<u><b>773,367</b></u>

6. Comments:

W-2501 started on 4-2-14.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

**Self-Monitoring Report (cont'd)**  
**LLNL Treatment Facility B (TFB)**  
**AREA TFB**

Operator Signature: Scott Kawaguchi Date: 05-01-2014



**Land Observation Report date:  
TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month April Year 2014

2. Date compliance sampling performed 04-03-2014

3. Weather Conditions:

Average air tempertaure (°C):	<u>10.69</u>
6-day total precipitation (in):	<u>0.76</u>
Average wind speed/direction (mph):	<u>5/ SSW</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-06-2014



# Self-Monitoring Report

## LLNL Treatment Facility B (TFB)

### AREA TFB

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<b><u>01</u></b>	<b><u>02</u></b>	<b><u>03</u></b>	<b><u>04</u></b>	<b><u>05</u></b>	<b><u>06</u></b>	<b><u>07</u></b>	<b><u>08</u></b>	<b><u>09</u></b>	<b><u>10</u></b>	<b><u>11</u></b>	<b><u>12</u></b>	<b><u>13</u></b>	<b><u>14</u></b>	<b><u>15</u></b>
	<b><u>16</u></b>	<b><u>17</u></b>	<b><u>18</u></b>	<b><u>19</u></b>	<b><u>20</u></b>	<b><u>21</u></b>	<b><u>22</u></b>	<b><u>23</u></b>	<b><u>24</u></b>	<b><u>25</u></b>	<b><u>26</u></b>	<b><u>27</u></b>	<b><u>28</u></b>	<b><u>29</u></b>	<b><u>30</u></b>

Total monthly time facility operated (hours): 731

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<b><u>05-01-2014</u></b>
Influent pH:	<b><u>7.0</u></b>
Effluent pH:	<b><u>7.5</u></b>
Effluent Temperature (°C):	<b><u>19.2</u></b>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	361,920	8.3
W-610	300,156	6.6
W-620	228,112	5.3
W-621	0	0.0
W-655	0	0.0
W-704	758,896	17.3
W-1423	155,084	3.9
W-2501	652,435	15.5
W-2502	254,440	6.1
Total:	<b><u>2,711,043</u></b>	<b><u>63.0</u></b>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<b><u>West Perimeter Drainage Channel</u></b>	<b><u>TFB-R002</u></b>	<b><u>2,153,291</u></b>
<b><u>Building 133 Cooling Tower</u></b>	<b><u>TFB-E-B133CT</u></b>	<b><u>557,752</u></b>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

**Self-Monitoring Report (cont'd)**  
**LLNL Treatment Facility B (TFB)**  
**AREA TFB**

Operator Signature: Shirley K. Kavanagh Date: 06-03-2014

**Land Observation Report date:  
TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month May Year 2014

2. Date compliance sampling performed 05-01-2014

3. Weather Conditions:

Average air tempertaure (°C):	<u>16.56</u>
6-day total precipitation (in):	<u>0.21</u>
Average wind speed/direction (mph):	<u>5/ S</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Scott L. Garza Date: 06-09-2014

# Self-Monitoring Report

## LLNL Treatment Facility B (TFB)

### AREA TFB

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>31</u>														
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 753

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-02-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>18.6</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-357	368,008	8.3
W-610	309,392	6.9
W-620	228,272	5.4
W-621	0	0.0
W-655	28	0.0
W-704	774,160	17.5
W-1423	155,704	3.4
W-2501	678,999	16.9
W-2502	241,543	5.5
Total:	<u>2,756,106</u>	<u>63.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>2,549,664</u>
<u>Building 133 Cooling Tower</u>	<u>TFB-E-B133CT</u>	<u>206,442</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

**Self-Monitoring Report (cont'd)**  
**LLNL Treatment Facility B (TFB)**  
**AREA TFB**

Operator Signature: Shirley Kawaguchi Date: 07-03-2014

**Land Observation Report date:  
TFB-R002 - West Perimeter Drainage Channel**

1. Reporting Period: Business Month June Year 2014

2. Date compliance sampling performed 06-02-2014

3. Weather Conditions:

Average air tempertaure (°C):	<u>17.71</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>5/ SW</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve P. Wagner Date: 07-07-2014

**Self-Monitoring Report  
LLNL Treatment Facility C (TFC)  
AREA TFC**

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April      **01** **02** **03** 04 05 06 07 08 09 10 11 12 13 14 15  
             16 17 18 19 20 **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): **288**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **04-01-2014**  
Influent pH: **7.0**  
Effluent pH: **7.5**  
Effluent Temperature (°C): **19.6**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	<b>98,792</b>	<b>14.2</b>
W-1015	<b>1,108</b>	<b>0.0</b>
W-1102	<b>1,510</b>	<b>0.0</b>
W-1103	<b>689</b>	<b>0.0</b>
W-1104	<b>471,264</b>	<b>27.6</b>
W-1116	<b>27,360</b>	<b>1.5</b>
Total:	<u><b>600,723</b></u>	<u><b>43.3</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Las Positas</b></u>	<u><b>TFC-R003</b></u>	<u><b>600,723</b></u>

6. Comments:

Facility was shutdown on 04-03-2014 for air stripper manifold modification.  
Facility was restarted on 04-21-2014 with W-1104 and W-1116. W-701 started on 4-28-14.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-01-2014**



**Land Observation Report date:  
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month April Year 2014

2. Date compliance sampling performed 04-01-2014

3. Weather Conditions:

Average air tempertaure (°C):	<u>11.19</u>
6-day total precipitation (in):	<u>1.03</u>
Average wind speed/direction (mph):	<u>5/ SSW</u>

4. Receiving Data:

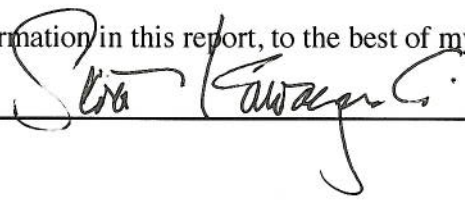
Sample			
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>	
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>	

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-06-2014



# Self-Monitoring Report

## LLNL Treatment Facility C (TFC)

### AREA TFC

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<b><u>01</u></b>	<b><u>02</u></b>	<b><u>03</u></b>	<b><u>04</u></b>	<b><u>05</u></b>	<b><u>06</u></b>	<b><u>07</u></b>	<b><u>08</u></b>	<b><u>09</u></b>	<b><u>10</u></b>	<b><u>11</u></b>	<b><u>12</u></b>	<b><u>13</u></b>	<b><u>14</u></b>	<b><u>15</u></b>
	<b><u>16</u></b>	<b><u>17</u></b>	<b><u>18</u></b>	<b><u>19</u></b>	<b><u>20</u></b>	<b><u>21</u></b>	<b><u>22</u></b>	<b><u>23</u></b>	<b><u>24</u></b>	<b><u>25</u></b>	<b><u>26</u></b>	<b><u>27</u></b>	<b><u>28</u></b>	<b><u>29</u></b>	<b><u>30</u></b>

Total monthly time facility operated (hours): 730

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<b><u>05-01-2014</u></b>
Influent pH:	<b><u>7.0</u></b>
Effluent pH:	<b><u>7.5</u></b>
Effluent Temperature (°C):	<b><u>20.7</u></b>

4. Wellfield Data:

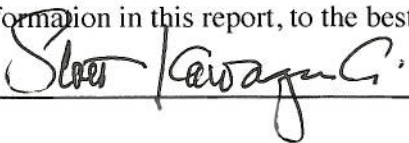
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-701</b>	<b>618,496</b>	<b>14.4</b>
<b>W-1015</b>	<b>0</b>	<b>0.0</b>
<b>W-1102</b>	<b>0</b>	<b>0.0</b>
<b>W-1103</b>	<b>0</b>	<b>0.0</b>
<b>W-1104</b>	<b>1,141,696</b>	<b>27.3</b>
<b>W-1116</b>	<b>69,424</b>	<b>1.7</b>
<b>Total:</b>	<b><u>1,829,616</u></b>	<b><u>43.4</u></b>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<b><u>Arroyo Las Positas</u></b>	<b><u>TFC-R003</u></b>	<b><u>1,829,616</u></b>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **06-03-2014**

**Land Observation Report date:  
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month May Year 2014

2. Date compliance sampling performed 05-01-2014

3. Weather Conditions:

Average air tempertaure (°C):	<u>16.56</u>
6-day total precipitation (in):	<u>0.21</u>
Average wind speed/direction (mph):	<u>5/ S</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-09-2014

**Self-Monitoring Report  
LLNL Treatment Facility C (TFC)  
AREA TFC**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>31</u>														
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 710

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-02-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-701	602,896	14.3
W-1015	0	0.0
W-1102	0	0.0
W-1103	0	0.0
W-1104	1,122,000	27.5
W-1116	66,552	1.5
Total:	<u>1,791,448</u>	<u>43.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,791,448</u>

6. Comments:

Facility was shutdown on 06-05-2014 due to air stripper manifold leaks.  
Repaired and restarted on 06-07-2014.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-03-2014

**Land Observation Report date:  
TFC-R003 - Arroyo Las Positas**

1. Reporting Period: Business Month June Year 2014

2. Date compliance sampling performed 06-02-2014

3. Weather Conditions:

Average air tempertaure (°C):	<u>17.71</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>5/ SW</u>

4. Receiving Data:

Sample		
<u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>No</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-07-2014

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 1 (MTU1)**  
**AREA TFC-E**

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
             16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 712

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-01-2014  
Influent pH: 7.0  
Effluent pH: 7.5  
Effluent Temperature (°C): 20

4. Wellfield Data:

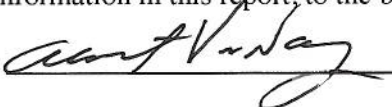
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-368</b>	<b>46,517</b>	<b>1.1</b>
<b>W-413</b>	<b>703,443</b>	<b>16.2</b>
Total:	<u><b>749,960</b></u>	<u><b>17.3</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Las Positas</b></u>	<u><b>TFC-R003</b></u>	<u><b>749,960</b></u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-07-2014

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 1 (MTU1)**  
**AREA TFC-E**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
            16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 691

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 05-01-2014  
Influent pH: 7.0  
Effluent pH: 7.5  
Effluent Temperature (°C): 22.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-368	41,460	1.0
W-413	688,516	16.6
Total:	<u>729,976</u>	<u>17.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>729,976</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-03-2014



**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 1 (MTU1)**  
**AREA TFC-E**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>30</u>	<u>31</u>															
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>					

Total monthly time facility operated (hours): 625

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-02-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20.8</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-368</b>	<b>37,500</b>	<b>1.0</b>
<b>W-413</b>	<b>624,168</b>	<b>16.5</b>
Total:	<u><b>661,668</b></u>	<u><b>17.5</b></u>

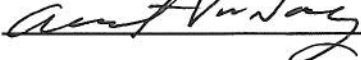
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Las Positas</b></u>	<u><b>TFC-R003</b></u>	<u><b>661,668</b></u>

6. Comments:

Facility went down due to W-413 pump overload. Overload set point was adjusted and facility restarted.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-10-2014

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 1 (PTU1)**  
**AREA TFC-SE**

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
              16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 729

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-02-2014  
Influent pH: 7.0  
Effluent pH: 7.5  
Effluent Temperature (°C): 19.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	89,583	2.1
W-2201	107,321	10.0
Total:	<u>196,904</u>	<u>12.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>196,904</u>

6. Comments:

W-2201 was secured on 4-7-14.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-01-2014



**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 1 (PTU1)**  
**AREA TFC-SE**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u><b>01</b></u>	<u>02</u>	<u>03</u>	<u>04</u>	<u><b>05</b></u>	<u><b>06</b></u>	<u><b>07</b></u>	<u><b>08</b></u>	<u><b>09</b></u>	<u><b>10</b></u>	<u><b>11</b></u>	<u><b>12</b></u>	<u><b>13</b></u>	<u><b>14</b></u>	<u><b>15</b></u>
	<u><b>16</b></u>	<u>17</u>	<u>18</u>	<u>19</u>	<u><b>20</b></u>	<u><b>21</b></u>	<u><b>22</b></u>	<u><b>23</b></u>	<u><b>24</b></u>	<u><b>25</b></u>	<u><b>26</b></u>	<u><b>27</b></u>	<u><b>28</b></u>	<u><b>29</b></u>	<u><b>30</b></u>

Total monthly time facility operated (hours): **620**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u><b>05-01-2014</b></u>
Influent pH:	<u><b>7.0</b></u>
Effluent pH:	<u><b>7.5</b></u>
Effluent Temperature (°C):	<u><b>18.7</b></u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-1213</b>	<b>73,087</b>	<b>2.2</b>
<b>W-2201</b>	<b>0</b>	<b>0.0</b>
Total:	<u><b>73,087</b></u>	<u><b>2.2</b></u>

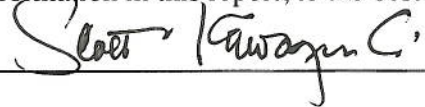
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Las Positas</b></u>	<u><b>TFC-R003</b></u>	<u><b>73,087</b></u>

6. Comments:

Facility was shutdown on 05-01-2014 due to flow meter failure. Facility was restarted on 05-05-2014. Facility was shutdown on 05-18-2014 due to power failure. Facility was restarted on 05-19-2014.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **06-03-2014**

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 1 (PTU1)**  
**AREA TFC-SE**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>31</u>														
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 755

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-02-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>17.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1213	86,799	2.0
W-2201	0	0.0
Total:	<u>86,799</u>	<u>2.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>86,799</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawagen G. Date: 07-03-2014

# Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April      **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**  
**16** **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): 727

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-07-2014  
Influent pH: 7.5  
Effluent pH: 7.5  
Effluent Temperature (°C): 26.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-351	54,535	1.2
W-653	2,516	3.0
W-906	38	0.0
W-907-2	432,811	10.0
W-2011	5,703	3.0
W-2101	6,649	3.0
W-2102	12,895	3.0
W-1206	526,747	12.2
W-1208	960,681	22.3
Total:	<u>2,002,575</u>	<u>57.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>2,002,575</u>
<u>TFD irrigation supply</u>	<u>TFD-IRR</u>	<u>0</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

**Self-Monitoring Report (cont'd)**  
**LLNL Treatment Facility D (TFD)**  
**AREA TFD**

Operator Signature: Shirley Kawaguchi Date: 05-01-2014

# Self-Monitoring Report LLNL Treatment Facility D (TFD) AREA TFD

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u><b>01</b></u>	<u><b>02</b></u>	<u><b>03</b></u>	<u><b>04</b></u>	<u><b>05</b></u>	<u><b>06</b></u>	<u><b>07</b></u>	<u><b>08</b></u>	<u><b>09</b></u>	<u><b>10</b></u>	<u><b>11</b></u>	<u><b>12</b></u>	<u><b>13</b></u>	<u><b>14</b></u>	<u><b>15</b></u>
	<u><b>16</b></u>	<u><b>17</b></u>	<u><b>18</b></u>	<u><b>19</b></u>	<u><b>20</b></u>	<u><b>21</b></u>	<u><b>22</b></u>	<u><b>23</b></u>	<u><b>24</b></u>	<u><b>25</b></u>	<u><b>26</b></u>	<u><b>27</b></u>	<u><b>28</b></u>	<u><b>29</b></u>	<u><b>30</b></u>

Total monthly time facility operated (hours): 726

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u><b>05-01-2014</b></u>
Influent pH:	<u><b>7.0</b></u>
Effluent pH:	<u><b>7.5</b></u>
Effluent Temperature (°C):	<u><b>22</b></u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-351</b>	<b>56,012</b>	<b>1.3</b>
<b>W-653</b>	<b>2,440</b>	<b>3.0</b>
<b>W-906</b>	<b>0</b>	<b>0.0</b>
<b>W-907-2</b>	<b>424,182</b>	<b>10.0</b>
<b>W-2011</b>	<b>5,548</b>	<b>3.0</b>
<b>W-2101</b>	<b>6,455</b>	<b>3.0</b>
<b>W-2102</b>	<b>11,858</b>	<b>3.0</b>
<b>W-1206</b>	<b>538,686</b>	<b>12.4</b>
<b>W-1208</b>	<b>960,648</b>	<b>22.2</b>
 Total:	 <u><b>2,005,829</b></u>	 <u><b>57.9</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>West Perimeter Drainage Channel</b></u>	<u><b>TFB-R002</b></u>	<u><b>2,005,829</b></u>
<u><b>TFD irrigation supply</b></u>	<u><b>TFD-IRR</b></u>	<u><b>0</b></u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

**Self-Monitoring Report (cont'd)**  
**LLNL Treatment Facility D (TFD)**  
**AREA TFD**

Operator Signature: Steve Kragan Date: 06-03-2014



# Self-Monitoring Report

## LLNL Treatment Facility D (TFD)

### AREA TFD

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u><b>31</b></u>																			
June	<u><b>01</b></u>	<u><b>02</b></u>	<u><b>03</b></u>	<u><b>04</b></u>	<u><b>05</b></u>	<u><b>06</b></u>	<u><b>07</b></u>	<u><b>08</b></u>	<u><b>09</b></u>	<u><b>10</b></u>	<u><b>11</b></u>	<u><b>12</b></u>	<u><b>13</b></u>	<u><b>14</b></u>	<u><b>15</b></u>					
	<u><b>16</b></u>	<u><b>17</b></u>	<u><b>18</b></u>	<u><b>19</b></u>	<u><b>20</b></u>	<u><b>21</b></u>	<u><b>22</b></u>	<u><b>23</b></u>	<u><b>24</b></u>	<u><b>25</b></u>	<u><b>26</b></u>	<u><b>27</b></u>	<u><b>28</b></u>	<u><b>29</b></u>	<u><b>30</b></u>					

Total monthly time facility operated (hours): **753**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u><b>06-03-2014</b></u>
Influent pH:	<u><b>7.5</b></u>
Effluent pH:	<u><b>7.5</b></u>
Effluent Temperature (°C):	<u><b>19.1</b></u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-351	60,013	1.3
W-653	2,177	3.0
W-906	0	0.0
W-907-2	430,934	9.6
W-2011	5,624	3.0
W-2101	6,565	3.0
W-2102	12,469	3.0
W-1206	574,661	12.6
W-1208	993,392	22.0
Total:	<u><b>2,085,835</b></u>	<u><b>57.5</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Las Positas</b></u>	<u><b>TFC-R003</b></u>	<u><b>2,070,332</b></u>
<u><b>TFD irrigation supply</b></u>	<u><b>TFD-IRR</b></u>	<u><b>15,503</b></u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

**Self-Monitoring Report (cont'd)**  
**LLNL Treatment Facility D (TFD)**  
**AREA TFD**

Operator Signature: Scott Karger Date: 07-03-2014



# Self-Monitoring Report

## LLNL Portable Treatment Unit 8 (PTU8)

### AREA TFD-E

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 718

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-01-2014  
Influent pH: 7.0  
Effluent pH: 7.5  
Effluent Temperature (°C): 20.2

4. Wellfield Data:


<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2006	723	0.0
W-1301	24,835	0.5
W-1306	6,871	0.2
W-1307	264,692	5.3
W-1550	15,014	0.4
W-2203	6,323	0.1
W-1303	47,405	1.1
Total:	<u>365,863</u>	<u>7.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>365,863</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-07-2014

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 8 (PTU8)**  
**AREA TFD-E**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
          16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 644

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 05-01-2014  
Influent pH: 7.0  
Effluent pH: 7.5  
Effluent Temperature (°C): 25.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2006	722	0.0
W-1301	22,129	0.7
W-1303	41,381	1.0
W-1306	5,540	0.1
W-1307	219,823	5.7
W-1550	12,820	0.3
W-2203	5,455	0.2
Total:	<u>307,870</u>	<u>8.0</u>


5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>307,870</u>

6. Comments:

Facility shut down on 5/4/14 for unknown reason, may of been a power outage.  
Facility was re-started on 5/5/14 at 1130 hrs.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-03-2014

# Self-Monitoring Report

## LLNL Portable Treatment Unit 8 (PTU8)

### AREA TFD-E

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>30</u>	<u>31</u>															
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>					

Total monthly time facility operated (hours): 696

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-02-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>21.8</u>

4. Wellfield Data:

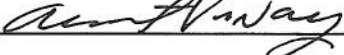
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-2006	703	0.0
W-1301	22,445	0.5
W-1303	41,663	1.0
W-1306	5,374	0.1
W-1307	225,932	5.7
W-1550	12,944	0.3
W-2203	5,508	0.1
<hr/>		
Total:	<u>314,569</u>	<u>7.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>314,569</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-10-2014

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 10 (PTU10)**  
**AREA TFD-HPD**

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	08	09	10	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 610

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>04-14-2014</u>
Influent pH:	<u>7.4</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	164,510	4.5
Total:	<u>164,510</u>	<u>4.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>164,510</u>

6. Comments:

Facility was shutdown at 15:37 on 04-07-2014 to replace discharge pump. Facility was restarted at 13:33 on 04-11-2014. Facility was shutdown at 12:01 on 04-29-2014 to make repairs on outlet piping of discharge pump. Facility was restarted at 09:21 04-30-2014.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Rydell Date: 05-13-2014



**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 10 (PTU10)**  
**AREA TFD-HPD**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 728

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-07-2014</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	<u>207,557</u>	<u>4.7</u>
Total:	<u>207,557</u>	<u>4.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>207,557</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kild Date: 06-12-2014

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 10 (PTU10)**  
**AREA TFD-HPD**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>31</u>														
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>			

Total monthly time facility operated (hours): 676

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-11-2014</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>21</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1254	163,723	4.4
Total:	<u>163,723</u>	<u>4.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>163,723</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: \_\_\_\_\_ Date: 07-10-2014

**Self-Monitoring Report  
LLNL ISB01 (ISB01)  
AREA TFD-HPD**

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1650	0	0.0
W-1653	0	0.0
W-1655	0	0.0
W-1657	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>ISB01 injection well</u>	<u>W-1552</u>	<u>0</u>

6. Comments:

The facility did not operate during the month because the pump at W-1650 was bad and needed to be replaced.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kidd Date: 05-13-2014

**Self-Monitoring Report  
LLNL ISB01 (ISB01)  
AREA TFD-HPD**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May        01 02 03 04 05 **06** **07** **08** 09 10 11 12 13 14 15  
             **16** 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 52

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1650	49	0.2
W-1653	0	0.0
W-1655	0	0.0
W-1657	0	0.0
Total:	<u>49</u>	<u>0.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>ISB01 injection well</u>	<u>W-1552</u>	<u>49</u>

6. Comments:

Compliance sampling is not required at this facility due to the fact that ISB01 is a closed loop system, and water is not discharged to the environment. Water was circulated through the system but was not treated. The facility did not operate for most of the month due to communication problems with TFRT and due to the fact that the flow meters were replaced at the facility. There is a 16.33% difference between the current month's totalizer reading ( W-1552) and the previous month's facility totalizer reading which is due to problems with the W-1552 flow meter.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty L. L. L. Date: 06-12-2014



**Self-Monitoring Report  
LLNL ISB01 (ISB01)  
AREA TFD-HPD**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	31																	
June	01	02	03	04	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>			
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>						

Total monthly time facility operated (hours): 521

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1650	755	3.0
W-1653	596	2.2
W-1655	0	0.0
W-1657	0	0.0
Total:	<u>1,351</u>	<u>5.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>ISB01 injection well</u>	<u>W-1552</u>	<u>1,351</u>

6. Comments:

Compliance sampling is not required at this facility due to the fact that ISB01 is a closed loop system, and water is not discharged to the environment. Water was circulated through the system but was not treated. The facility did not operate from May 31 thru June 4 until certain mechanical and electronic issues were addressed.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuhn Date: 07-15-2014

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 2 (PTU2)**  
**AREA TFD-S**

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

March	<u><b>31</b></u>														
April	<u><b>01</b></u>	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 47

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u><b>04-01-2014</b></u>
Influent pH:	<u><b>7.0</b></u>
Effluent pH:	<u><b>7.0</b></u>
Effluent Temperature (°C):	<u><b>20</b></u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-1503</b>	<b>28,096</b>	<b>10.2</b>
<b>W-1504</b>	<b>23,000</b>	<b>8.4</b>
<b>W-1510</b>	<b>0</b>	<b>0.0</b>
Total:	<u><b>51,096</b></u>	<u><b>18.6</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Las Positas</b></u>	<u><b>TFC-R003</b></u>	<u><b>51,096</b></u>

6. Comments:

Facility was shutdown on 04-01-2014 for REVAL/system modifications.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-06-2014**

# Self-Monitoring Report

## LLNL Portable Treatment Unit 2 (PTU2)

### AREA TFD-S

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	01	02	03	04	05	06	07	08	09	10	11	12	<u><b>13</b></u>	<u><b>14</b></u>	<u><b>15</b></u>
	16	17	18	19	<u><b>20</b></u>	<u><b>21</b></u>	<u><b>22</b></u>	<u><b>23</b></u>	24	25	26	<u><b>27</b></u>	<u><b>28</b></u>	<u><b>29</b></u>	<u><b>30</b></u>

Total monthly time facility operated (hours): **58**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u><b>05-15-2014</b></u>
Influent pH:	<u><b>7.0</b></u>
Effluent pH:	<u><b>7.0</b></u>
Effluent Temperature (°C):	<u><b>23.4</b></u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-1503</b>	<b>21,086</b>	<b>11.4</b>
<b>W-1504</b>	<b>24,630</b>	<b>11.7</b>
<b>W-1510</b>	<b>12,891</b>	<b>6.4</b>
<b>W-2601</b>	<b>18,139</b>	<b>12.2</b>
Total:	<u><b>76,746</b></u>	<u><b>41.8</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Las Positas</b></u>	<u><b>TFC-R003</b></u>	<u><b>76,746</b></u>

6. Comments:

During T&V operations in the month of May 2014 the facility was cycled as follows: Facility was restarted on 05-13-2014. Facility was shutdown on 05-13-2014. Facility was restarted on 05-14-2014. Facility was shutdown on 05-14-2014. Facility was restarted on 05-15-2014. Facility was shutdown on 05-15-2014. Facility was restarted on 05-20-2014. Facility was shutdown on 05-20-2014. Facility was restarted on 05-21-2014. Facility was shutdown on 05-21-2014. Facility was restarted on 05-22-2014. Facility was shutdown on 05-22-2014. Facility was restarted on 05-23-2014. Facility was shutdown on 05-23-2014. Facility was restarted on 05-27-2014. Facility was shutdown on 05-27-2014. Facility was restarted on 05-28-2014. Facility was shutdown on 05-30-2014.

**Self-Monitoring Report (cont'd)**  
**LLNL Portable Treatment Unit 2 (PTU2)**  
**AREA TFD-S**

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-30-2014**

# Self-Monitoring Report

## LLNL Portable Treatment Unit 2 (PTU2)

### AREA TFD-S

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	31
June	01 <u>02</u> <u>03</u> <u>04</u> <u>05</u> <u>06</u> <u>07</u> <u>08</u> <u>09</u> <u>10</u> <u>11</u> <u>12</u> <u>13</u> <u>14</u> <u>15</u> <u>16</u> <u>17</u> <u>18</u> <u>19</u> <u>20</u> <u>21</u> <u>22</u> <u>23</u> <u>24</u> <u>25</u> <u>26</u> <u>27</u> <u>28</u> <u>29</u> <u>30</u>

Total monthly time facility operated (hours): 679

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-05-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>23.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1503	230,850	0.0
W-1504	143,404	0.0
W-1510	59,586	0.0
W-2601	162,275	9.8
Total:	<u>596,115</u>	<u>9.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>596,115</u>

6. Comments:

Facility secure from 5/30/14 to 6/2/14 for TFD-S EWFSUP pre-test well recovery.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-01-2014



# Self-Monitoring Report

## LLNL Portable Treatment Unit 11 (PTU11)

### AREA TFD-SE

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

March	<u>31</u>														
April	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 744

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>04-01-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>19.7</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	251,517	5.1
W-2005	31,247	0.7
W-1308	52,464	1.3
W-1403	45,298	1.1
W-1904	0	0.0
SIP-ETC-201	0	0.0
Total:	<u>380,526</u>	<u>8.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>380,526</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-07-2014

# Self-Monitoring Report

## LLNL Portable Treatment Unit 11 (PTU11)

### AREA TFD-SE

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 696

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 05-01-2014  
Influent pH: 7.0  
Effluent pH: 7.5  
Effluent Temperature (°C): 21.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	240,058	5.6
W-2005	26,885	0.6
W-1308	47,592	1.1
W-1403	43,300	1.1
W-1904	0	0.0
SIP-ETC-201	0	0.0
Total:	<u>357,835</u>	<u>8.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>357,835</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-03-2014

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 11 (PTU11)**  
**AREA TFD-SE**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>30</u>	<u>31</u>																	
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>				
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>							

Total monthly time facility operated (hours): 696

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-02-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>21.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-314	226,761	5.7
W-2005	21,035	0.7
W-1308	44,830	1.2
W-1403	40,408	1.0
W-1904	0	0.0
SIP-ETC-201	0	0.0
Total:	<u>333,034</u>	<u>8.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>333,034</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-10-2014



# Self-Monitoring Report

## LLNL Portable Treatment Unit 12 (PTU12)

### AREA TFD-SS

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 720

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-01-2014  
Influent pH: 7.0  
Effluent pH: 7.0  
Effluent Temperature (°C): 19.5

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	281,107	6.5
W-1601	41,171	1.0
W-1602	108,032	2.6
W-1603	438,952	10.2
Total:	<u>869,262</u>	<u>20.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>869,262</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-06-2014

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 12 (PTU12)**  
**AREA TFD-SS**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
          16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 720

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 05-07-2014  
Influent pH: 7.0  
Effluent pH: 7.0  
Effluent Temperature (°C): 19.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	278,201	6.5
W-1601	40,209	1.0
W-1602	108,825	2.6
W-1603	430,349	10.0
Total:	<u>857,584</u>	<u>20.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>857,584</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-02-2014

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 12 (PTU12)**  
**AREA TFD-SS**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>31</u>														
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 744

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-03-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>19.7</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1523	260,874	6.4
W-1601	38,976	0.9
W-1602	108,661	2.5
W-1603	436,743	9.9
Total:	<u>845,254</u>	<u>19.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>845,254</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-01-2014

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 6 (PTU6)**  
**AREA TFD-W**

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
              16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 724

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-08-2014  
Influent pH: 7.4  
Effluent pH: 7.5  
Effluent Temperature (°C): 21.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1215	434,503	10.1
W-1216	432,825	10.1
W-1902	677,324	15.1
Total:	<u>1,544,652</u>	<u>35.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,544,652</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy K. Smith Date: 05-13-2014

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 6 (PTU6)**  
**AREA TFD-W**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
            16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 700

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 05-07-2014  
Influent pH: 7.5  
Effluent pH: 7.5  
Effluent Temperature (°C): 20.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1215	417,358	10.0
W-1216	417,800	10.1
W-1902	629,353	15.3
Total:	<u>1,464,511</u>	<u>35.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,464,511</u>

6. Comments:

Facility shut down at 14:50 on 05-04-2014 due to W-1216 low flow. Facility was restarted at 11:06 on 05-05-2014. The facility was down for approximately 20 hours.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kulik Date: 06-11-2014



**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 6 (PTU6)**  
**AREA TFD-W**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>31</u>														
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>			

Total monthly time facility operated (hours): 677

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-11-2014</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>21.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1215	403,362	10.0
W-1216	408,474	10.0
W-1902	606,523	15.1
Total:	<u>1,418,359</u>	<u>35.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>1,418,359</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty Kidd Date: 07-10-2014

# Self-Monitoring Report

## LLNL Vapor Extraction System 11 (VES11)

### AREA VTFD-ETCS

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treatment facility operated

April      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
              16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1904	112	0.0	0	0	0
W-ETC-2003	497,410	10.3	-.64	79	728
SIP-ETC-201	8	0.0	0	0	0
W-ETC-2004A	125,208	2.5	-3.72	79	728
W-ETC-2004B	849,051	17.0	-3.43	79	728
Total:	<u>1,471,789</u>	<u>29.8</u>			

4. Comments:

Due changing ambient conditions, extraction well flow rates were adjusted several times during reporting month to optimize mass removal while establishing safe operating parameters for the extraction blower. Quarterly vapor samples collected from extraction wells 4-15-14.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-05-2014

# Self-Monitoring Report

## LLNL Vapor Extraction System 11 (VES11)

### AREA VTFD-ETCS

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treatment facility operated

May      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
           16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1904	0	0.0	0	0	0
W-ETC-2003	318,056	7.3	-.45	72	625
W-ETC-2004A	51,855	1.4	-2.05	72	625
W-ETC-2004B	482,996	11.2	-1.89	72	625
SIP-ETC-201	0	0.0	0	0	0
Total:	<u>852,907</u>	<u>19.9</u>			

4. Comments:

Facility shutdown on 05-01-2014 at 19:30 hrs. on low discharge separator level alarm, a result of high ambient temperatures. Facility was restarted on 05-02-2014 at 10:50. Facility shutdown 05-02-2014 at 11:15 on low discharge separator level alarm and did not operate 5-3-14 and 5-4-14. Operating liquid was added to blower reservoir 05-05-2014 and facility restarted at 11:45. Well field flow rates reduced 5-13-14 to curtail the loss of operating liquid caused by elevated ambient temperatures. Due to malfunction of well field totalizers, end month volumes for extraction wells were calculated from individual flow measurements, and not derived from facility totalizer values.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-23-2014



# Self-Monitoring Report

## LLNL Vapor Extraction System 11 (VES11)

### AREA VTFD-ETCS

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treatment facility operated

May	<u>30</u>	<u>31</u>														
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>					

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1904	0	0.0	0	0	0
W-ETC-2003	283,547	6.2	-.39	76	685
W-ETC-2004A	43,659	1.2	-1.59	76	685
W-ETC-2004B	407,741	9.4	-1.48	76	685
SIP-ETC-201	0	0.0	0	0	0
Total:	<u>734,947</u>	<u>16.8</u>			

4. Comments:

Due to malfunction of well field totalizers, end month volumes for extraction wells were calculated from individual flow measurements, and not derived from facility totalizer values.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-14-2014

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 3 (PTU3)**  
**AREA TFE-E**

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
             16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 728

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-01-2014  
Influent pH: 7.0  
Effluent pH: 7.0  
Effluent Temperature (°C): 19.4

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	348,840	8.1
W-1109	36,164	0.8
W-1903	12,030	0.3
W-1909	0	0.0
W-2305	0	0.0
Total:	<u>397,034</u>	<u>9.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>397,034</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-05-2014

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 3 (PTU3)**  
**AREA TFE-E**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
          16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 703

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 05-01-2014  
Influent pH: 7.0  
Effluent pH: 7.0  
Effluent Temperature (°C): 20.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-566</b>	<b>294,617</b>	<b>8.1</b>
<b>W-1109</b>	<b>1,349</b>	<b>0.8</b>
<b>W-1903</b>	<b>12,916</b>	<b>0.2</b>
<b>W-1909</b>	<b>0</b>	<b>0.0</b>
<b>W-2305</b>	<b>0</b>	<b>0.0</b>
Total:	<u><b>308,882</b></u>	<u><b>9.2</b></u>

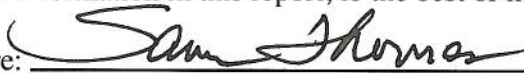
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Las Positas</b></u>	<u><b>TFC-R003</b></u>	<u><b>308,882</b></u>

6. Comments:

Facility was shutdown on 05-12-2014 @10:45 to perform electrical work W-1109. Facility was restarted on 05-12-2014 at 13:20. W-566 flow rate adjusted to 5.0 GPM 5-22-14.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **06-03-2014**

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 3 (PTU3)**  
**AREA TFE-E**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>30</u>	<u>31</u>													
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>				

Total monthly time facility operated (hours): 656

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-02-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>20.3</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-566	193,584	5.0
W-1109	0	0.0
W-1903	12,034	0.4
W-1909	0	0.0
W-2305	31	0.0
Total:	<u>205,649</u>	<u>5.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>205,649</u>

6. Comments:

Facility was shutdown on 06-23-2014 at 13:25 to replace the level transducer in W-566. Facility was restarted on 06-24-2014 at 13:17

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 07-08-2014

**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 07 (GTU07)**  
**AREA TFE-HS**

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April      **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**  
**16** **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): **697**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **04-03-2014**  
Influent pH: **7.0**  
Effluent pH: **7.0**  
Effluent Temperature (°C): **20.3**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-2105</b>	<b>798</b>	<b>1.0</b>
Total:	<u><b>798</b></u>	<u><b>1.0</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Las Positas</b></u>	<u><b>TFC-R003</b></u>	<u><b>798</b></u>

6. Comments:

GTU07/W-2105 secured 4-2-14 at 15:10 to allow groundwater level to rise in the well prior to collection of monthly samples. Facility was restarted 4-3-14 at 13:37.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-05-2014**



**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 07 (GTU07)**  
**AREA TFE-HS**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May      **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**  
**16** **17** **18** **19** **20** 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): **482**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **05-08-2014**  
Influent pH: **7.0**  
Effluent pH: **7.0**  
Effluent Temperature (°C): **17.6**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-2105</b>	<b>491</b>	<b>0.5</b>
Total:	<u><b>491</b></u>	<u><b>0.5</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Las Positas</b></u>	<u><b>TFC-R003</b></u>	<u><b>491</b></u>

6. Comments:

Facility secured 5-20-14 due to W-2105 totalizer malfunction. W-2105 utilizes vacuum-enhanced groundwater extraction combined with cyclic pump operation. Therefore constant flow rate and hours of operation may not correspond.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: *Sam Thomas* Date: **06-10-2014**

**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 07 (GTU07)**  
**AREA TFE-HS**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	30	31													
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26				

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-2105</b>	<b>0</b>	<b>0.0</b>
Total:	<u><b>0</b></u>	<u><b>0.0</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<b><u>Arroyo Las Positas</u></b>	<b><u>TFC-R003</u></b>	<b><u>0</u></b>

6. Comments:

Facility secured 5/20/14 due to W-2105 flowmeter failure and did not operate during this reporting month.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: **07-08-2014**

# Self-Monitoring Report

## LLNL Portable Treatment Unit 9 (PTU9)

### AREA TFE-NW

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

March	<u>31</u>														
April	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 744

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>04-15-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>23.9</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	280,244	6.3
W-1409	77,982	1.7
Total:	<u>358,226</u>	<u>8.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>358,226</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-06-2014



**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 9 (PTU9)**  
**AREA TFE-NW**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
          16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 581

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 05-07-2014  
Influent pH: 7.0  
Effluent pH: 7.0  
Effluent Temperature (°C): 23.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	211,693	6.2
W-1409	62,131	1.7
Total:	<u>273,824</u>	<u>8.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>273,824</u>

6. Comments:

Facility shutdown on 05-24-2014 due to PLC failure. Facility was restarted on 05-29-2014.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-06-2014

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 9 (PTU9)**  
**AREA TFE-NW**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>31</u>														
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	11	12	13	14	15
	16	<u>17</u>	<u>18</u>	19	20	21	22	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	28	29	<u>30</u>

Total monthly time facility operated (hours): 314

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-03-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>23.9</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1211	115,996	5.8
W-1409	33,907	1.8
Total:	<u>149,903</u>	<u>7.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>149,903</u>

6. Comments:

All system down time due to facility discharge pump trouble shooting and repairs.  
Facility was shutdown on 06-10-2014. Facility was restarted on 06-17-2014.  
Facility was shutdown on 06-18-2014. Facility was restarted on 06-23-2014.  
Facility was shutdown on 06-27-2014. Facility was restarted on 06-30-2014.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-01-2014

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 04 (MTU04)**  
**AREA TFE-SE**

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
             16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 717

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-03-2014  
Influent pH: 7.0  
Effluent pH: 7.0  
Effluent Temperature (°C): 19.8

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-359</b>	<b>357,644</b>	<b>8.3</b>
Total:	<u><b>357,644</b></u>	<u><b>8.3</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Las Positas</b></u>	<u><b>TFC-R003</b></u>	<u><b>357,644</b></u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-01-2014

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 04 (MTU04)**  
**AREA TFE-SE**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
          16 17 18 19 20 21 22 23 24 25 26 27 28 29

Total monthly time facility operated (hours): 701

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 05-01-2014  
Influent pH: 7.0  
Effluent pH: 7.0  
Effluent Temperature (°C): 20.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-359</b>	<b>350,356</b>	<b>8.3</b>
Total:	<u><b>350,356</b></u>	<u><b>8.3</b></u>


5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Las Positas</b></u>	<u><b>TFC-R003</b></u>	<u><b>350,356</b></u>

6. Comments:

Facility was shutdown on 05-16-2014 at 10:43 to perform system interlock checks. Facility was restarted on 05-16-2014 at 10:56.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-03-2014

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 04 (MTU04)**  
**AREA TFE-SE**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>30</u>	<u>31</u>														
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	08	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>					

Total monthly time facility operated (hours): 612

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-02-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>21.5</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-359</b>	<b>296,413</b>	<b>8.3</b>
Total:	<u><b>296,413</b></u>	<u><b>8.3</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Las Positas</b></u>	<u><b>TFC-R003</b></u>	<u><b>296,413</b></u>

6. Comments:

Facility was shutdown on 06-07-2014 at 06:00 hrs, the result of an unplanned power outage. Facility was restarted on 06-09-2014 at 16:08 hrs.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-08-2014



**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 03 (MTU03)**  
**AREA TFE-SW**

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
              16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 720

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-08-2014  
Influent pH: 7.4  
Effluent pH: 7.4  
Effluent Temperature (°C): 23.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1516	447,733	10.5
W-1518	11,569	0.3
W-1520	50,426	1.2
W-1522	46,108	1.1
Total:	<u>555,836</u>	<u>13.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>555,836</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-13-2014

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 03 (MTU03)**  
**AREA TFE-SW**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
          16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 718

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 05-06-2014  
Influent pH: 7.4  
Effluent pH: 7.4  
Effluent Temperature (°C): 19.9

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1516	433,488	10.1
W-1518	12,151	0.3
W-1520	48,318	1.1
W-1522	47,708	1.1
Total:	<u>541,665</u>	<u>12.6</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>541,665</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty Kuhl Date: 06-11-2014

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 03 (MTU03)**  
**AREA TFE-SW**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>31</u>														
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>			

Total monthly time facility operated (hours): 672

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-10-2014</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>22.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1516	447,073	10.1
W-1518	12,597	0.3
W-1520	42,751	1.1
W-1522	41,092	1.2
Total:	<u>543,513</u>	<u>12.7</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>543,513</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty Kild Date: 07-10-2014



**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 05 (MTU05)**  
**AREA TFE-W**

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
              16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 720

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-08-2014  
Influent pH: 7.4  
Effluent pH: 7.5  
Effluent Temperature (°C): 22.1

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-292	260,891	6.0
W-305	604,645	14.1
Total:	<u>865,536</u>	<u>20.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>865,536</u>

6. Comments:  
NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Rutil Date: 05-13-2014

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 05 (MTU05)**  
**AREA TFE-W**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 716

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-06-2014</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>20.8</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-292	259,158	6.1
W-305	562,336	14.1
Total:	<u>821,494</u>	<u>20.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>821,494</u>

6. Comments:

W-305 shut down at 14:35 on 5-14-14 due to low flow. The high current setpoint had to be increased for the pump. The pump was restarted at 10:48 on 5-16-14.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty Kyllid Date: 06-11-2014

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 05 (MTU05)**  
**AREA TFE-W**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>31</u>														
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>			

Total monthly time facility operated (hours): 672

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-10-2014</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>21.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-292	243,792	6.0
W-305	563,799	14.0
Total:	<u>807,591</u>	<u>20.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>807,591</u>

6. Comments:

NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kuhl Date: 07-10-2014

# Self-Monitoring Report

## LLNL Vapor Extraction System 16 (VES16)

### AREA VTFE-ELM

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treatment facility operated


April      **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**  
**16** **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1903	49,874	1.1	-19.5	70	718
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-003	1,052,964	24.2	-1.2	70	718
W-543-1908	0	0.0	0	0	0
Total:	<u>1,102,838</u>	<u>25.4</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-05-2014

# Self-Monitoring Report

## LLNL Vapor Extraction System 16 (VES16)

### AREA VTFE-ELM

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treatment facility operated

May      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
           16 17 18 19 20 21 22 23 24 25 26 27 28 29


3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1903	47,395	1.1	-19.38	68	693
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-001	16	0.0	0	0	0
W-543-003	990,724	23.6	-1.3	68	693
W-543-1908	12	0.0	0	0	0
Total:	<u>1,038,147</u>	<u>24.6</u>			

4. Comments:

Facility was shutdown on 05-12-2014 at 10:50 to execute O&M activities at W-1109. Facility was restarted 05-12-2014 at 13:26 Quarterly vapor samples collected from idle and operating extraction wells 5-5-14

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-10-2014



# Self-Monitoring Report

## LLNL Vapor Extraction System 16 (VES16)

### AREA VTFF-ELM

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treatment facility operated

May	<u>30</u>	<u>31</u>														
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>					

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1903	37,499	0.8	-19.31	73	654
W-1909	0	0.0	0	0	0
W-2305	0	0.0	0	0	0
W-543-001	0	0.0	0	0	0
W-543-003	922,854	23.5	-1.3	73	654
W-543-1908	0	0.0	0	0	0
Total:					
	<u>960,353</u>	<u>24.3</u>			

4. Comments:

Facility was shutdown 6-23-14 at 13:22 to facilitate electrical work at W-1109,  
and was restarted 6-24-14 at 13:30.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-08-2014

# Self-Monitoring Report

## LLNL Vapor Extraction System 12 (VES12)

### AREA VTFE-HS

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treatment facility operated

April      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
              16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-2105	30,905	1.4	-16.17	76	723
W-ETS-2008A	4	0.0	0	0	0
W-ETS-2008B	835,852	15.3	-4.59	76	723
W-ETS-2009	22	0.0	0	0	1
W-ETS-2010A	7	0.0	0	0	0
W-ETS-2010B	7	0.0	0	0	0
Total:	<u>866,797</u>	<u>16.7</u>			

4. Comments:

Due changing ambient conditions, extraction well flow rates were adjusted several times during reporting month to optimize mass removal while establishing safe operating parameters for the extraction blower. Quarterly vapor samples collected from extraction wells 4/16/14.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-13-2014



# Self-Monitoring Report

## LLNL Vapor Extraction System 12 (VES12)

### AREA VTFFE-HS

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treatment facility operated

May      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
           16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-2105	51,396	1.0	-16.86	60	704
W-ETS-2008A	0	0.0	0	0	0
W-ETS-2008B	651,784	15.2	-5.1	60	704
W-ETS-2009	0	0.0	0	0	0
W-ETS-2010A	0	0.0	0	0	0
W-ETS-2010B	0	0.0	0	0	0
Total:	<u>703,180</u>	<u>16.2</u>			

4. Comments:

Vapor extraction from W-2105 terminated 5-27-14 at 11:20 due to failure of groundwater totalizer.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-10-2014

# Self-Monitoring Report

## LLNL Vapor Extraction System 12 (VES12)

### AREA VTFF-HS

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treatment facility operated

May	<u>30</u>	<u>31</u>															
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>						

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2105	0	0.0	0	0	0
W-ETS-2008A	0	0.0	0	0	0
W-ETS-2008B	621,644	15.0	-5.08	75	673
W-ETS-2009	0	0.0	0	0	0
W-ETS-2010A	0	0.0	0	0	0
W-ETS-2010B	0	0.0	0	0	0
Total:	<u>621,644</u>	<u>15.0</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-08-2014

**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 01 (GTU01)**  
**AREA TFG-1**

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
             16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 709

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-10-2014  
Influent pH: 7.0  
Effluent pH: 7.0  
Effluent Temperature (°C): 22.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	206,581	5.0
Total:	<u>206,581</u>	<u>5.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>206,581</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-06-2014

**Land Observation Report date:  
TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month April Year 2014

2. Date compliance sampling performed 04-10-2014

3. Weather Conditions:

Average air tempertaure (°C):	<u>15.84</u>
6-day total precipitation (in):	<u>0.09</u>
Average wind speed/direction (mph):	<u>3/ S</u>

4. Receiving Data:

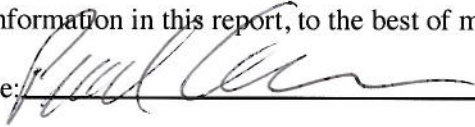
Sample <u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-06-2014

**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 01 (GTU01)**  
**AREA TFG-1**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	17	18	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 646

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-07-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>22.2</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	<b>199,790</b>	<b>5.2</b>
Total:	<u><b>199,790</b></u>	<u><b>5.2</b></u>

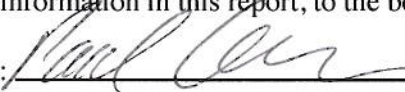
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>199,790</u>

6. Comments:

System Secured on 5/16/14 for well recovery, system restarted on 5/19/14.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-02-2014

**Land Observation Report date:  
TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month May Year 2014

2. Date compliance sampling performed 05-07-2014

3. Weather Conditions:

Average air tempertaure (°C):	<u>16.12</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>7/ SW</u>

4. Receiving Data:

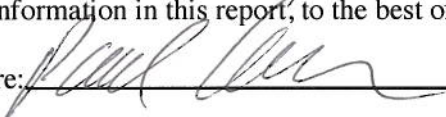
Sample <u>Location</u>	<u>pH</u>	<u>Temperature (C)</u>
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-01-2014



**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 01 (GTU01)**  
**AREA TFG-1**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>31</u>														
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 744

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-03-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>22.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1111	216,979	5.1
Total:	<u>216,979</u>	<u>5.1</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Seco</u>	<u>TFG-ASW</u>	<u>216,979</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-01-2014



**Land Observation Report date:  
TFG-ASW - Arroyo Seco**

1. Reporting Period: Business Month June Year 2014

2. Date compliance sampling performed 06-03-2014

3. Weather Conditions:

Average air tempertaure (°C):	<u>17.68</u>
6-day total precipitation (in):	<u>0.00</u>
Average wind speed/direction (mph):	<u>5/ SW</u>

4. Receiving Data:

Sample Location	pH	Temperature (C)
<u>Receiving Water</u>	<u>N/M</u>	<u>N/M</u>

5. Land Observations, as "Yes" or "No", for reporting month:

<u>Visual Observations</u>	<u>Effluent</u>	<u>Receiving Water</u>
Floating and Suspended Materials of Waste Origin	<u>No</u>	<u>No</u>
Odor	<u>No</u>	<u>No</u>
Discoloration and Turbidity	Not Required	<u>No</u>
Evidence of Beneficial Water Use	Not Required	<u>N/A</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 08-01-2014

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 02 (MTU02)**  
**AREA TFG-N**

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April      **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**  
**16** **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): 732

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **04-10-2014**  
Influent pH: **7.0**  
Effluent pH: **7.0**  
Effluent Temperature (°C): **22.6**

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-1806</b>	<b>45,984</b>	<b>1.1</b>
<b>W-1807</b>	<b>159,072</b>	<b>3.8</b>
Total:	<u><b>205,056</b></u>	<u><b>4.9</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Las Positas</b></u>	<u><b>TFC-R003</b></u>	<u><b>205,056</b></u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-07-2014**

**Self-Monitoring Report**  
**LLNL Mini Treatment Unit 02 (MTU02)**  
**AREA TFG-N**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 726

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-07-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>22.5</u>

4. Wellfield Data:

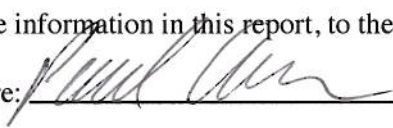
<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1806	46,225	1.1
W-1807	185,486	4.2
Total:	<u>231,711</u>	<u>5.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>231,711</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-02-2014

# Self-Monitoring Report

## LLNL Mini Treatment Unit 02 (MTU02)

### AREA TFG-N

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>31</u>														
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 752

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 05-31-2014  
 Influent pH: 7.0  
 Effluent pH: 7.0  
 Effluent Temperature (°C): 22.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1806	46,767	1.0
W-1807	186,784	4.2
Total:	<u>233,551</u>	<u>5.2</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>233,551</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-01-2014

# Self-Monitoring Report

## LLNL Portable Treatment Unit 5 (PTU5)

### AREA TF406

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 725

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-09-2014  
Influent pH: 7.4  
Effluent pH: 7.4  
Effluent Temperature (°C): 21.2

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	77	4.5
W-1310	380,082	9.0
Total:	<u>380,159</u>	<u>13.5</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>380,159</u>

6. Comments:  
NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy April Date: 05-13-2014



**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 5 (PTU5)**  
**AREA TF406**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
            16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

Total monthly time facility operated (hours): 727

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 05-06-2014  
Influent pH: 7.5  
Effluent pH: 7.5  
Effluent Temperature (°C): 21.3

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	0	0.0
W-1310	381,610	9.0
Total:	<u>381,610</u>	<u>9.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>381,610</u>

6. Comments:  
NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kull Date: 06-11-2014

**Self-Monitoring Report**  
**LLNL Portable Treatment Unit 5 (PTU5)**  
**AREA TF406**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>31</u>														
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>			

Total monthly time facility operated (hours): 677

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-10-2014</u>
Influent pH:	<u>7.5</u>
Effluent pH:	<u>7.5</u>
Effluent Temperature (°C):	<u>23</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1309	0	0.0
W-1310	354,134	8.9
Total:	<u>354,134</u>	<u>8.9</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>354,134</u>

6. Comments:  
NA

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty Kuhl Date: 07-10-2014



**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 03 (GTU03)**  
**AREA TF406-NW**

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 718

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>04-15-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>22.4</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	279,335	6.4
Total:	<u>279,335</u>	<u>6.4</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>279,335</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-06-2014

**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 03 (GTU03)**  
**AREA TF406-NW**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 718

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-07-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>22.5</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-1801</b>	<b>274,410</b>	<b>6.4</b>
Total:	<u><b>274,410</b></u>	<u><b>6.4</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Las Positas</b></u>	<u><b>TFC-R003</b></u>	<u><b>274,410</b></u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **06-02-2014**

**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 03 (GTU03)**  
**AREA TF406-NW**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>31</u>																
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>		
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>		

Total monthly time facility operated (hours): 670

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>06-03-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>22.6</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1801	251,320	6.3
Total:	<u>251,320</u>	<u>6.3</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>251,320</u>

6. Comments:

System secure from 6/6/14 to 6/9/14 for scheduled power outage.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-01-2014

**Self-Monitoring Report**  
**LLNL Solar Treatment Unit 09 (STU09)**  
**AREA TF518-N**

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

March	31														
April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-1410</b>	<b>0</b>	<b>0.0</b>
Total:	<u><b>0</b></u>	<u><b>0.0</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Las Positas</b></u>	<u><b>TFC-R003</b></u>	<u><b>0</b></u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Shir Kawaguchi Date: 04-30-2014

**Self-Monitoring Report**  
**LLNL Solar Treatment Unit 09 (STU09)**  
**AREA TF518-N**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April	30																		
May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	19	20	21	22	23	24	25	26	27	28	29					

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-1410</b>	<b>0</b>	<b>0.0</b>
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Casagrande Date: 05-30-2014



**Self-Monitoring Report**  
**LLNL Solar Treatment Unit 09 (STU09)**  
**AREA TF518-N**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	30	31																	
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	19	20	21	22	23	24	25	26	27	28	29					

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-1410</b>	<b>0</b>	<b>0.0</b>
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>0</u>

6. Comments:

This treatment facility was shut down on 2-20-08 due to elevated tritium activities in the facility influent. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Steve Kawaguchi Date: 06-30-2014



**Self-Monitoring Report**  
**LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)**  
**AREA TF518-PZ**

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April      **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**  
**16** **17** **18** **19** **20** **21** **22** 23 **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): **672**

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-1615</b>	<b>43</b>	<b>0.0</b>
<b>W-518-1913</b>	<b>0</b>	<b>0.0</b>
<b>W-518-1914</b>	<b>0</b>	<b>0.0</b>
<b>W-518-1915</b>	<b>19</b>	<b>0.0</b>
<b>SVB-518-201</b>	<b>0</b>	<b>0.0</b>
<b>SVB-518-204</b>	<b>0</b>	<b>0.0</b>
Total:	<u><b>62</b></u>	<u><b>0.0</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>West Perimeter Drainage Channel</b></u>	<u><b>TFB-R002</b></u>	<u><b>62</b></u>

6. Comments:

Facility secured for maintenance 4/21/14 at 11:00, and restarted 4/23/14 at 08:00.  
Groundwater from this facility is transferred to and treated at TFB Main.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-05-2014**

**Self-Monitoring Report**  
**LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)**  
**AREA TF518-PZ**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May      **01** **02** **03** **04** **05** **06** **07** **08** **09** **10** **11** **12** **13** **14** **15**  
**16** **17** **18** **19** **20** **21** **22** **23** **24** **25** **26** **27** **28** **29** **30**

Total monthly time facility operated (hours): 726

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-1615</b>	<b>47</b>	<b>0.0</b>
<b>W-518-1913</b>	<b>0</b>	<b>0.0</b>
<b>W-518-1914</b>	<b>0</b>	<b>0.0</b>
<b>W-518-1915</b>	<b>19</b>	<b>0.0</b>
<b>SVB-518-201</b>	<b>0</b>	<b>0.0</b>
<b>SVB-518-204</b>	<b>0</b>	<b>0.0</b>
Total:	<u><b>66</b></u>	<u><b>0.0</b></u>

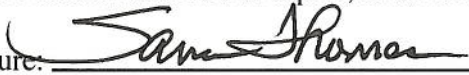
5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>West Perimeter Drainage Channel</b></u>	<u><b>TFB-R002</b></u>	<u><b>66</b></u>

6. Comments:

Transferred 706 gallons of groundwater to TFB Main for treatment 5-21-14.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **06-04-2014**

**Self-Monitoring Report**  
**LLNL Treatment Facility 518-HDTANK (TF518-HDTANK)**  
**AREA TF518-PZ**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>31</u>														
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 731

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1615	44	0.0
W-518-1913	0	0.0
W-518-1914	0	0.0
W-518-1915	11	0.0
SVB-518-201	0	0.0
SVB-518-204	0	0.0
Total:	<u>55</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>West Perimeter Drainage Channel</u>	<u>TFB-R002</u>	<u>55</u>

6. Comments:

Groundwater from this facility is transferred to and treated at TFB Main.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-08-2014

**Self-Monitoring Report**  
**LLNL Catalytic Reductive Dehalogenation 1 (CRD1)**  
**AREA TF5475-1**

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 7/27/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty L. Ford Date: 05-13-2014



**Self-Monitoring Report**  
**LLNL Catalytic Reductive Dehalogenation 1 (CRD1)**  
**AREA TF5475-1**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 7/27/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kylin Date: 06-12-2014

**Self-Monitoring Report**  
**LLNL Catalytic Reductive Dehalogenation 1 (CRD1)**  
**AREA TF5475-1**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	31														
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1302-2	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-1 injection</u>	<u>W-1302-1</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 7/27/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Kulin Date: 07-10-2014



# Self-Monitoring Report

## LLNL GAC Treatment Unit 09 (GTU09)

### AREA TF5475-2

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

March	<u>31</u>														
April	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>

Total monthly time facility operated (hours): 745

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): 04-10-2014  
 Influent pH: 7.0  
 Effluent pH: 7.0  
 Effluent Temperature (°C): 18.6

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	33,486	0.8
W-1415	0	0.0
Total:	<u>33,486</u>	<u>0.8</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>33,486</u>

6. Comments:

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-02-2014

**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 09 (GTU09)**  
**AREA TF5475-2**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>	<u>09</u>	<u>10</u>	<u>11</u>	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	

Total monthly time facility operated (hours): 271

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y):	<u>05-01-2014</u>
Influent pH:	<u>7.0</u>
Effluent pH:	<u>7.0</u>
Effluent Temperature (°C):	<u>22.8</u>

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1108	11,454	0.7
W-1415	0	0.0
Total:	<u>11,454</u>	<u>0.7</u>


5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>Arroyo Las Positas</u>	<u>TFC-R003</u>	<u>11,454</u>

6. Comments:

Facility shut down on 5/11/14 at 1130 hours due to W-1108 pump overload.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-10-2014

**Self-Monitoring Report**  
**LLNL GAC Treatment Unit 09 (GTU09)**  
**AREA TF5475-2**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	30	31																	
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15				
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): **Not Measured**

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
<b>W-1108</b>	<b>0</b>	<b>0.0</b>
<b>W-1415</b>	<b>0</b>	<b>0.0</b>
Total:	<u><b>0</b></u>	<u><b>0.0</b></u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u><b>Arroyo Las Positas</b></u>	<u><b>TFC-R003</b></u>	<u><b>0</b></u>

6. Comments:

Facility did not operate, W-1108 still down.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **07-10-2014**

**Self-Monitoring Report**  
**LLNL Catalytic Reductive Dehalogenation 2 (CRD2)**  
**AREA TF5475-3**

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

April	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1604	0	0.0
W-1605	0	0.0
W-1608	0	0.0
W-1609	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-13-2014

**Self-Monitoring Report**  
**LLNL Catalytic Reductive Dehalogenation 2 (CRD2)**  
**AREA TF5475-3**

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1604	0	0.0
W-1605	0	0.0
W-1608	0	0.0
W-1609	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty Kulik Date: 06-12-2014



**Self-Monitoring Report**  
**LLNL Catalytic Reductive Dehalogenation 2 (CRD2)**  
**AREA TF5475-3**

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treated ground water was discharged

May	31														
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
	16	17	18	19	20	21	22	23	24	25	26	27			

Total monthly time facility operated (hours): 0

3. Monthly Compliance Data:

Date compliance sampling performed (m/d/y): Not Measured

Influent pH:

Effluent pH:

Effluent Temperature (°C):

4. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(gal)</u>	<u>Instantaneous Flow Rate(gpm)</u>
W-1604	0	0.0
W-1605	0	0.0
W-1608	0	0.0
W-1609	0	0.0
Total:	<u>0</u>	<u>0.0</u>

5. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>CRD-2 injection</u>	<u>W-1610</u>	<u>0</u>

6. Comments:

The treatment facility was shut down on 8/31/07. The facility will be restarted once a solution for mixed waste generation is implemented.

7. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty Kridin Date: 07-10-2014



# Self-Monitoring Report

## LLNL Vapor Extraction System 08 (VES08)

### AREA VTF406-HS

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treatment facility operated

April      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
              16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

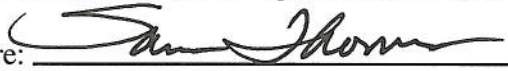
3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-217	559,282	12.8	-2.44	70	721
W-514-2007A	0	0.0	0	0	0
W-514-2007B	398,503	9.5	-2.68	70	721
Total:	<u>957,785</u>	<u>22.3</u>			

4. Comments:

End month volumes for extraction wells were calculated from individual flow measurements, and not derived from facility totalizer values. Facility and wellfield monthly hours of operation entered on this report were acquired from data logged on TFRT due to malfunction of facility clock.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-12-2014

# Self-Monitoring Report

## LLNL Vapor Extraction System 08 (VES08)

### AREA VTF406-HS

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treatment facility operated

May      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
             16 17 18 19 20 21 22 23 24 25 26 27 28 29

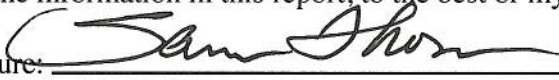
3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-217	534,565	12.9	-2.33	71	697
W-514-2007A	0	0.0	0	0	0
W-514-2007B	398,215	9.5	-2.59	71	697
Total:	<u>932,780</u>	<u>22.4</u>			

4. Comments:

End month volumes for extraction wells were calculated from individual flow measurements, and not derived from facility totalizer values. Facility and wellfield monthly hours of operation entered on this report were acquired from TFRT due to malfunction of facility clock.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-04-2014

# Self-Monitoring Report

## LLNL Vapor Extraction System 08 (VES08)

### AREA VTF406-HS

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treatment facility operated

May	<u>30</u>	<u>31</u>														
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	07	08	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>					

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-217	496,068	13.9	-2.15	80	607
W-514-2007A	0	0.0	0	0	0
W-514-2007B	335,379	9.2	-2.45	80	607
Total:	<u>831,447</u>	<u>23.1</u>			

4. Comments:

Facility was shutdown on 06-06-2014 at 11:16 hrs. for scheduled electrical work.

Facility was restarted 06-09-2014 at 08:20 hrs. End month volumes for extraction wells were calculated from individual flow measurements, and not derived from facility totalizer values. Facility and wellfield monthly hours of operation entered on this report were acquired from TFRT due to malfunction of facility clock.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-14-2014

# Self-Monitoring Report

## LLNL Vapor Extraction System 05 (VES05)

### AREA VTF511

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treatment facility operated

April      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
              16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-2204	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	354,212	8.3	-3.5	67	720
W-2208A	0	0.0	0	0	0
W-2208B	316,123	6.9	-2.8	67	720
Total:	<u>670,335</u>	<u>15.2</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 05-05-2014

# Self-Monitoring Report

## LLNL Vapor Extraction System 05 (VES05)

### AREA VTF511

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treatment facility operated

May      01 02 03 04 05 06 07 08 09 10 11 12 13 14 15  
             16 17 18 19 20 21 22 23 24 25 26 27 28 29

3. Wellfield Data:

<u>Source</u>	<u>Monthly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-2204	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2207A	18	3.0	-1	68	0
W-2207B	398,035	11.0	-4.3	68	685
W-2208A	14	3.5	-1	68	0
W-2208B	331,634	8.6	-3.8	68	685
Total:	<u>729,701</u>	<u>26.1</u>			

4. Comments:

Facility was shutdown on 05-21-2014 at 09:45 to perform routine maintenance and restarted 05-21-2014 at 09:55. Facility was shutdown 05-27-2014 at 15:20 to replace water saturated lead carbon filter. Carbon filter 041 was removed from service, and CF-045 installed in the fourth position. Facility was restarted on 05-28-2014 at 08:40. Quarterly vapor samples collected from idle and operating extraction wells 5-19-14. Facility was shutdown on 05-21-2014. Facility was restarted on 05-21-2014. Facility was shutdown on 05-27-2014. Facility was restarted on 05-28-2014. Facility secured upon discovery of concentration levels exceeding permit conditions at CF11. Carbon filters CF-041 replaced with CF-045.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-14-2014



# Self-Monitoring Report

## LLNL Vapor Extraction System 05 (VES05)

### AREA VTF511

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treatment facility operated

May	<u>30</u>	<u>31</u>														
June	<u>01</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	08	<u>09</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	
	<u>16</u>	<u>17</u>	<u>18</u>	<u>19</u>	<u>20</u>	<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>					

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-2204	0	0.0	0	0	0
W-2205	0	0.0	0	0	0
W-2206	0	0.0	0	0	0
W-2207A	0	0.0	0	0	0
W-2207B	416,813	11.0	-4.2	82	618
W-2208A	0	0.0	0	0	0
W-2208B	316,110	8.1	-3.5	82	618
Total:	<u>732,923</u>	<u>19.1</u>			

4. Comments:

Facility operation terminated 06-07-2014 at 06:00 by an unplanned power outage. Facility was restarted on 06-09-2014 at 16:08 hrs.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-08-2014



**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month April **Week: 1** Year **2014**

2. Dates (in **bold** and underline ) treatment facility operated

March      **29** **30** **31**  
April      **01** **02** **03** **04**

3. Wellfield Data:

<u>Source</u>	<u>Weekly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
<b>W-1615</b>	<b>41,131</b>	<b>4.1</b>	<b>-17.2</b>	<b>49</b>	<b>167</b>
<b>W-518-1913</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>W-518-1914</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>W-518-1915</b>	<b>16,051</b>	<b>1.6</b>	<b>-19.8</b>	<b>49</b>	<b>167</b>
<b>SVB-518-201</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SVB-518-204</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Total:	<b><u>57,182</u></b>	<b><u>5.7</u></b>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-05-2014**

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month April **Week: 2** Year **2014**

2. Dates (in **bold** and underline ) treatment facility operated

April      **05** **06** **07** **08** **09** **10** **11**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	41,205	4.1	-17.5	58	168
W-518-1913	0	0.0	0	0	168
W-518-1914	0	0.0	0	0	168
W-518-1915	14,070	1.4	-19.8	58	168
SVB-518-201	0	0.0	0	0	168
SVB-518-204	0	0.0	0	0	168
Total:	<u>55,275</u>	<u>5.5</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-05-2014**

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month April **Week: 3** Year **2014**

2. Dates (in **bold** and underline ) treatment facility operated

April **12** **13** **14** **15** **16** **17** **18**


3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	41,161	4.1	-17	56	167
W-518-1913	21	1.4	-5	0	0
W-518-1914	22	3.0	-1.5	70	0
W-518-1915	13,051	1.3	-19.5	56	167
SVB-518-201	26	2.5	-.5	70	0
SVB-518-204	25	2.1	-.5	0	0
Total:	<b><u>54,306</u></b>	<b><u>14.4</u></b>			

4. Comments:

Quarterly vapor samples collected from idle and operating extraction wells  
4-14-14

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-05-2014**

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month April **Week: 4** Year **2014**

2. Dates (in **bold** and underline ) treatment facility operated

April      **19** **20** **21** 22 **23** **24** **25**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	28,431	3.9	-17.2	50	122
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	8,748	1.2	-19.5	50	122
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<b><u>37,179</u></b>	<b><u>5.1</u></b>			

4. Comments:

Facility was shutdown on 04-21-2014. Facility was restarted on 04-23-2014.

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **05-05-2014**

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month May **Week: 1** Year **2014**

2. Dates (in **bold** and underline ) treatment facility operated


April      **26** **27** **28** **29** **30**  
May        **01** **02**

3. Wellfield Data:

<u>Source</u>	<u>Weekly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1615	42,440	4.1	-16	58	173
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	12,421	1.2	-18.5	58	173
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>54,861</u>	<u>5.3</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-03-2014

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month May **Week: 2** Year **2014**

2. Dates (in **bold** and underline ) treatment facility operated

May **03** **04** **05** **06** **07** **08** **09**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	40,961	4.1	-16.5	60	167
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	11,989	1.2	-19.5	60	167
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>52,950</u>	<u>5.3</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-03-2014



**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month May **Week: 3** Year **2014**

2. Dates (in **bold** and underline ) treatment facility operated

May **10** **11** **12** **13** **14** **15** **16**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
<b>W-1615</b>	<b>40,989</b>	<b>4.1</b>	<b>-16.3</b>	<b>72</b>	<b>167</b>
<b>W-518-1913</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>W-518-1914</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>W-518-1915</b>	<b>11,997</b>	<b>1.2</b>	<b>-19.5</b>	<b>72</b>	<b>167</b>
<b>SVB-518-201</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SVB-518-204</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Total:	<u><b>52,986</b></u>	<u><b>5.3</b></u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **06-03-2014**

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month May **Week: 4** Year 2014

2. Dates (in **bold** and underline ) treatment facility operated

May        **17** **18** **19** **20** **21** **22** **23**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	41,262	4.1	-16.3	54	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	13,083	1.3	-19.3	54	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>54,345</u>	<u>5.4</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 06-03-2014

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month May **Week: 5** Year **2014**

2. Dates (in **bold** and underline ) treatment facility operated

May      **24** **25** **26** **27** **28** **29** **30**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	41,868	4.0	-15.8	78	174
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	14,654	1.4	-17.5	78	174
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<b><u>56,522</u></b>	<b><u>5.4</u></b>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **06-03-2014**

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month June Week: 1 Year 2014

2. Dates (in **bold** and underline ) treatment facility operated

May 31  
June 01 02 03 04 05 06

3. Wellfield Data:

<u>Source</u>	<u>Weekly</u> <u>Volume(cu. ft)</u>	<u>Instantaneous</u> <u>Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours</u> <u>of Op.</u>
W-1615	39,070	4.0	-16	71	163
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	12,698	1.3	-19	71	163
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>51,768</u>	<u>5.3</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-08-2014

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month June **Week: 2** Year **2014**

2. Dates (in **bold** and underline ) treatment facility operated

June **07** **08** **09** **10** **11** **12** **13**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	39,481	4.1	-16	68	160
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	13,481	1.4	-19	68	160
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>52,962</u>	<u>5.5</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: 07-08-2014

**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month June **Week: 3** Year **2014**

2. Dates (in **bold** and underline ) treatment facility operated

June **14** **15** **16** **17** **18** **19** **20**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
<b>W-1615</b>	<b>40,555</b>	<b>4.0</b>	<b>-16</b>	<b>74</b>	<b>169</b>
<b>W-518-1913</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>W-518-1914</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>W-518-1915</b>	<b>14,194</b>	<b>1.4</b>	<b>-18.5</b>	<b>74</b>	<b>169</b>
<b>SVB-518-201</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>SVB-518-204</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Total:	<u><b>54,749</b></u>	<u><b>5.4</b></u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature:  Date: **07-08-2014**



**Self-Monitoring Report**  
**LLNL Vapor Extraction System 19 (VES19)**  
**AREA VTF518-PZ**

1. Reporting Period: Business Month June Week: 4 Year 2014

2. Dates (in **bold** and underline ) treatment facility operated

June **21** **22** **23** **24** **25** **26** **27**

3. Wellfield Data:

<u>Source</u>	<u>Weekly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1615	41,355	4.1	-16	68	168
W-518-1913	0	0.0	0	0	0
W-518-1914	0	0.0	0	0	0
W-518-1915	14,121	1.4	-19.2	68	168
SVB-518-201	0	0.0	0	0	0
SVB-518-204	0	0.0	0	0	0
Total:	<u>55,476</u>	<u>5.5</u>			

4. Comments:

5. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Sam Thomas Date: 07-08-2014

# Self-Monitoring Report

## LLNL Vapor Extraction System 01 (VES01)

### AREA VTF5475

1. Reporting Period: Business Month April Year 2014

2. Dates (in **bold** and underline ) treatment facility operated

April	<b>01</b>	<b>02</b>	<b>03</b>	<b>04</b>	<b>05</b>	<b>06</b>	<b>07</b>	<b>08</b>	<b>09</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-ETS-507	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
Total:					
	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Billy Ladd Date: 05-13-2014

# Self-Monitoring Report

## LLNL Vapor Extraction System 01 (VES01)

### AREA VTF5475

1. Reporting Period: Business Month May Year 2014

2. Dates (in **bold** and underline ) treatment facility operated

May	<b>01</b>	<b>02</b>	<b>03</b>	<b>04</b>	<b>05</b>	<b>06</b>	<b>07</b>	<b>08</b>	<b>09</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>
	<b>16</b>	<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-ETS-507	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
Total:					
	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty L. L. L. Date: 06-12-2014

# Self-Monitoring Report

## LLNL Vapor Extraction System 01 (VES01)

### AREA VTF5475

1. Reporting Period: Business Month June Year 2014

2. Dates (in **bold** and underline ) treatment facility operated

May	31															
June	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	
	16	17	18	19	20	21	22	23	24	25	26	27				

3. Wellfield Data:

<u>Source</u>	<u>Monthly Volume(cu. ft)</u>	<u>Instantaneous Flow Rate(scfm)</u>	<u>P(in. Hg)</u>	<u>T(°F)</u>	<u>Hours of Op.</u>
W-1605	0	0.0	0	0	0
W-1608	0	0.0	0	0	0
W-2211	0	0.0	0	0	0
W-2212	0	0.0	0	0	0
W-ETS-507	0	0.0	0	0	0
SVI-ETS-504	0	0.0	0	0	0
W-2302	0	0.0	0	0	0
W-2303	0	0.0	0	0	0
Total:	<u>0</u>	<u>0.0</u>			

4. Discharge Information:

<u>Discharge Location</u>	<u>Receiving Water Station</u>	<u>Volume</u>
<u>VTF5475 Vapor Injection Well</u>	<u>SVI-ETS-505</u>	<u>0</u>

5. Comments:

This treatment facility was shut down on 10-12-07 due to a FY2008 funding reduction. The facility will be restarted once a solution for mixed waste generation is implemented.

6. I certify that the information in this report, to the best of my knowledge, is true and correct.

Operator Signature: Betty K. Hild Date: 07-10-2014

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## **Attachment C**

### **Figures**

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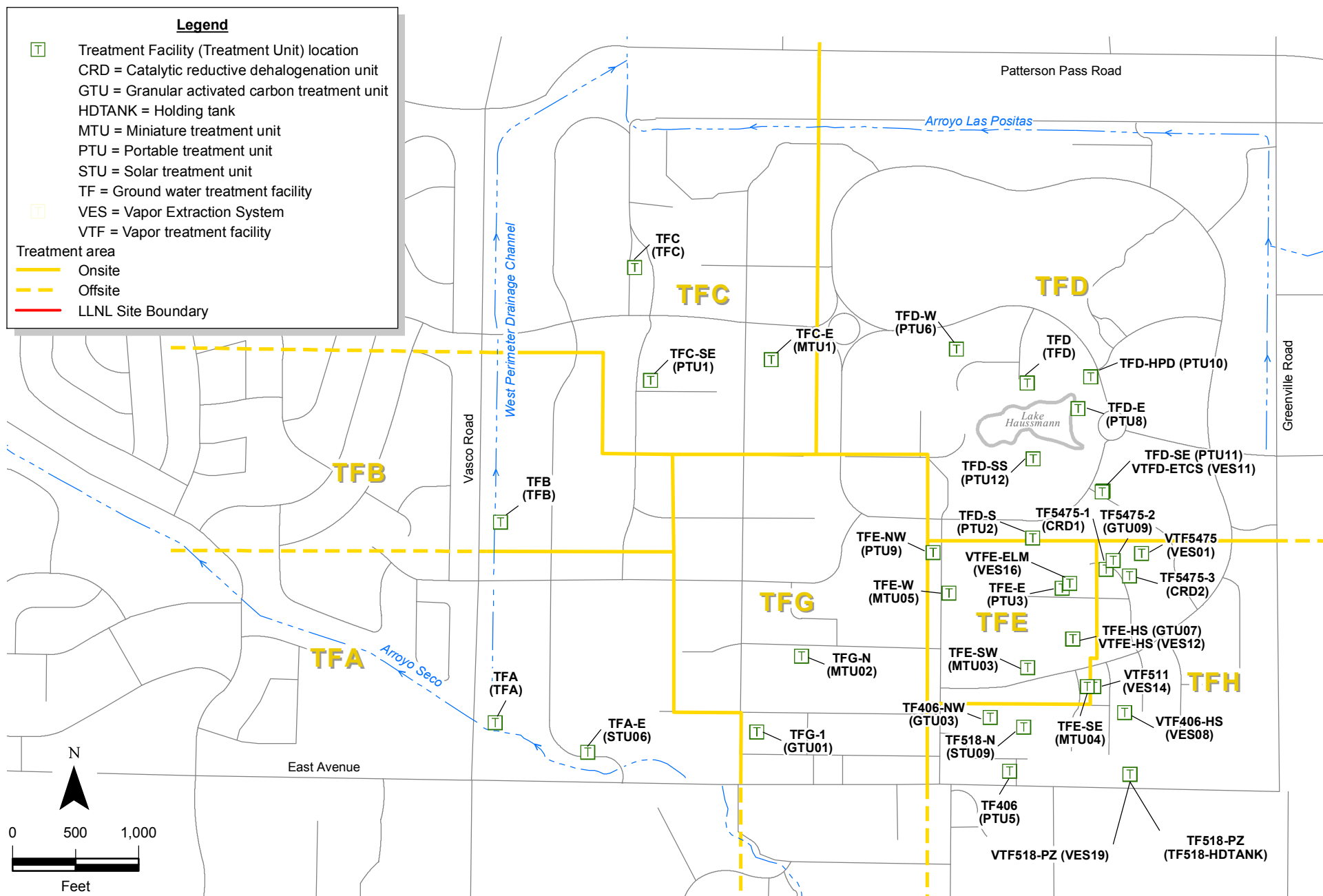


Figure 1. Livermore Site treatment areas and treatment facility locations.



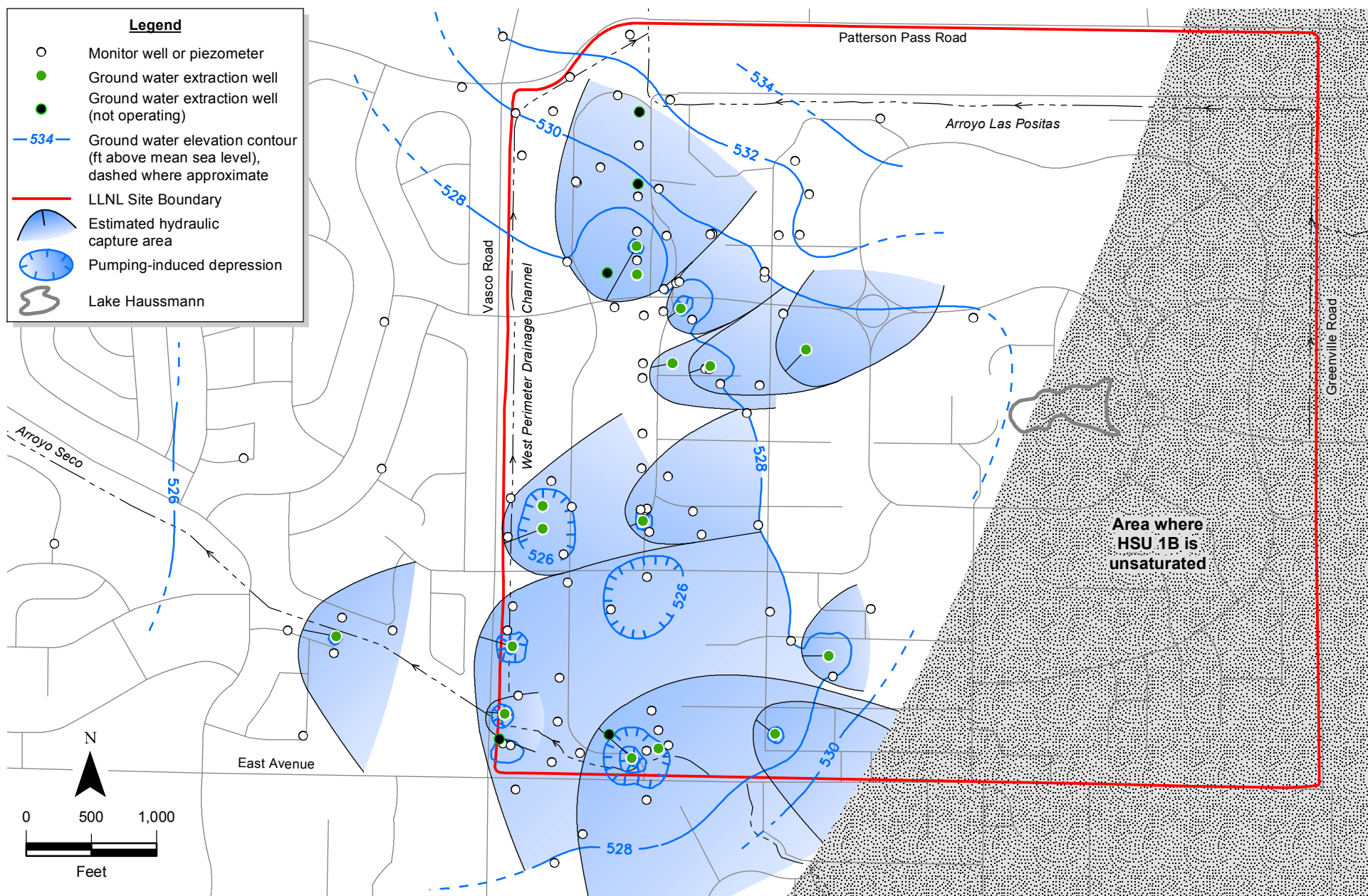


Figure 2. Ground water elevation contour map based on 116 wells completed within HSU-1B showing estimated hydraulic capture areas, LLNL and vicinity, second quarter 2014.

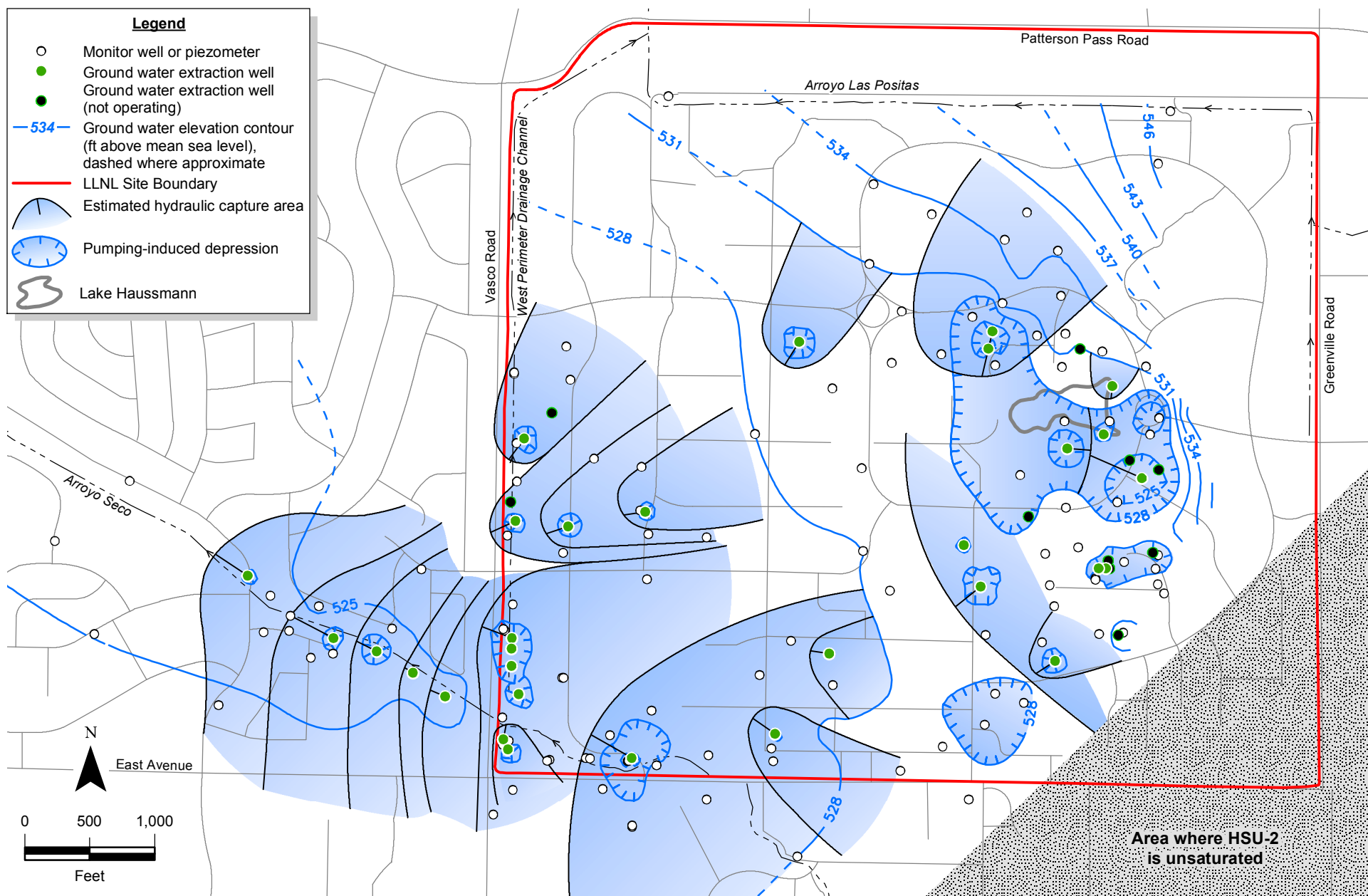


Figure 3. Ground water elevation contour map based on 154 wells completed within HSU-2 showing estimated hydraulic capture areas, LLNL and vicinity, second quarter 2014.

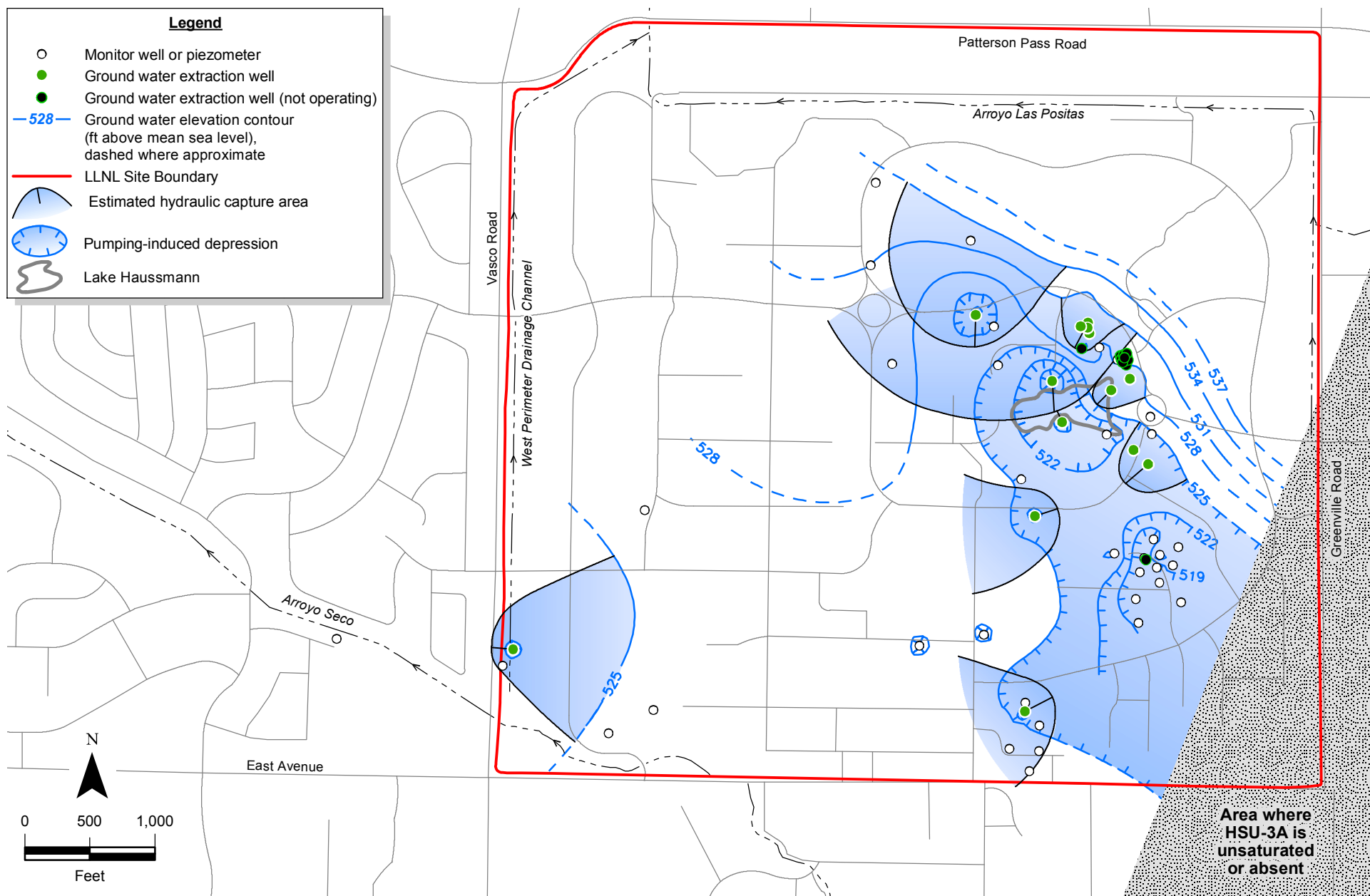


Figure 4. Ground water elevation contour map based on 63 wells completed within HSU-3A showing estimated hydraulic capture areas, LLNL and vicinity, second quarter 2014.

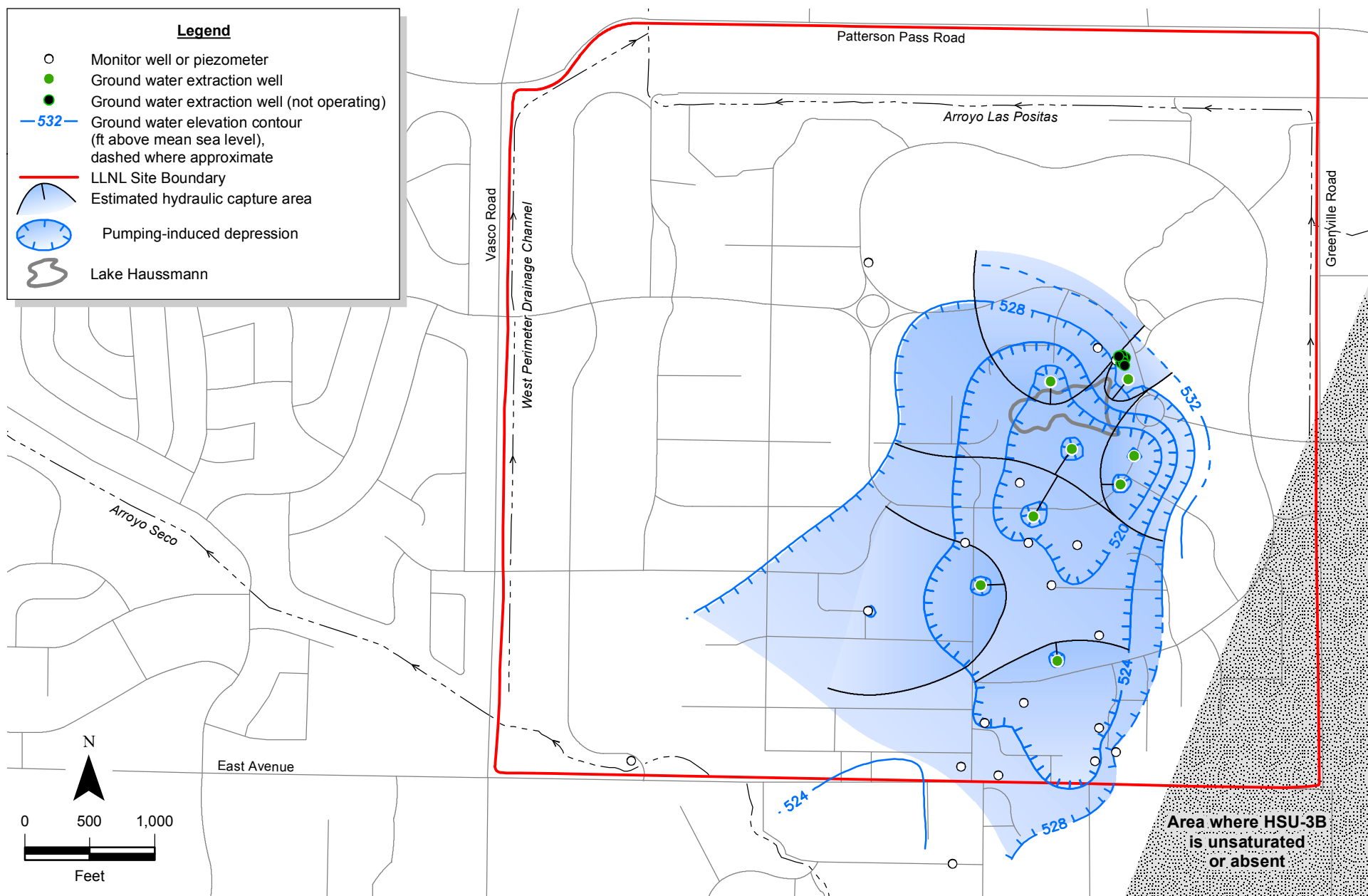


Figure 5. Ground water elevation contour map based on 34 wells completed within HSU-3B showing estimated hydraulic capture areas, LLNL and vicinity, second quarter 2014.

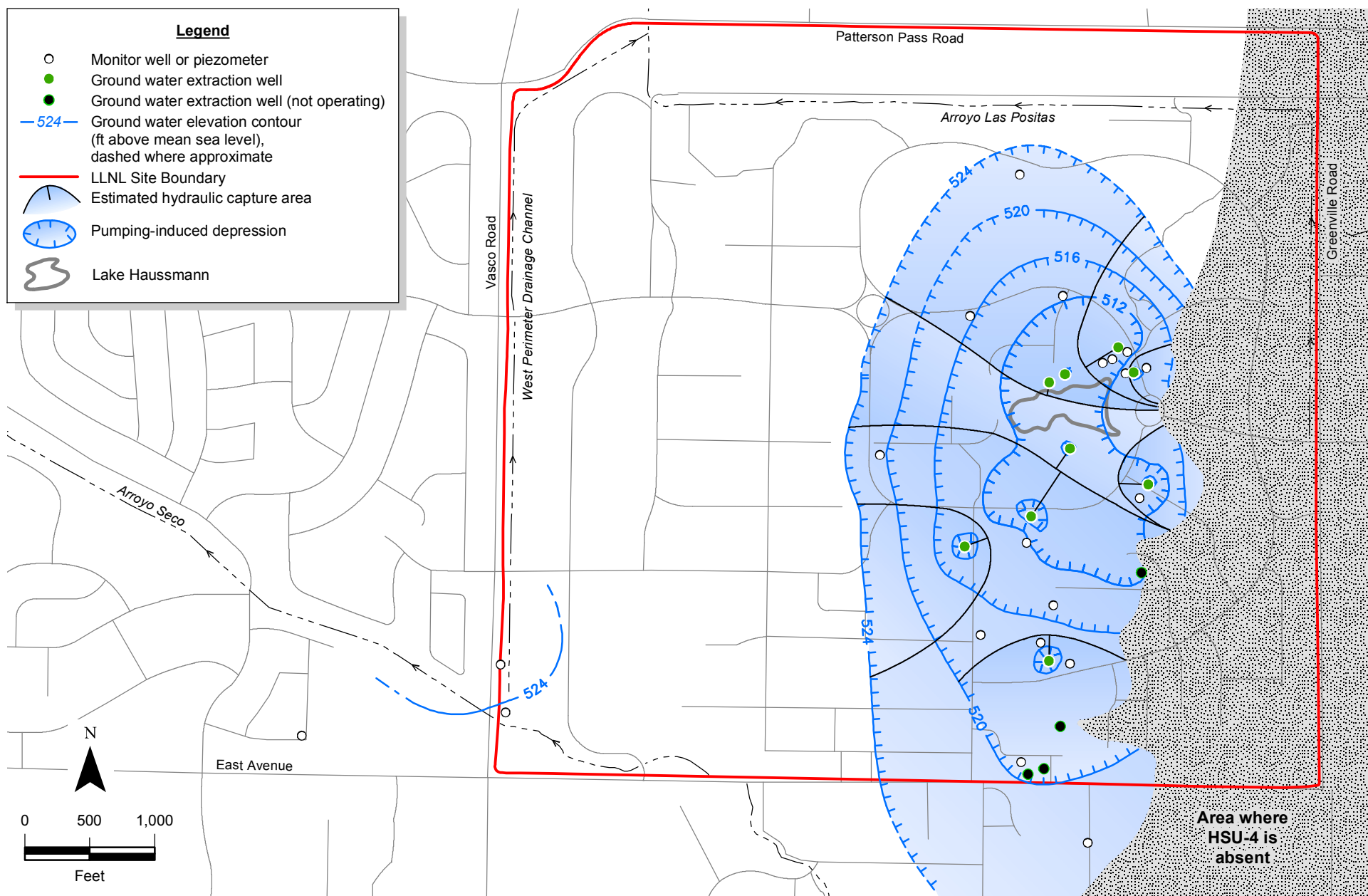
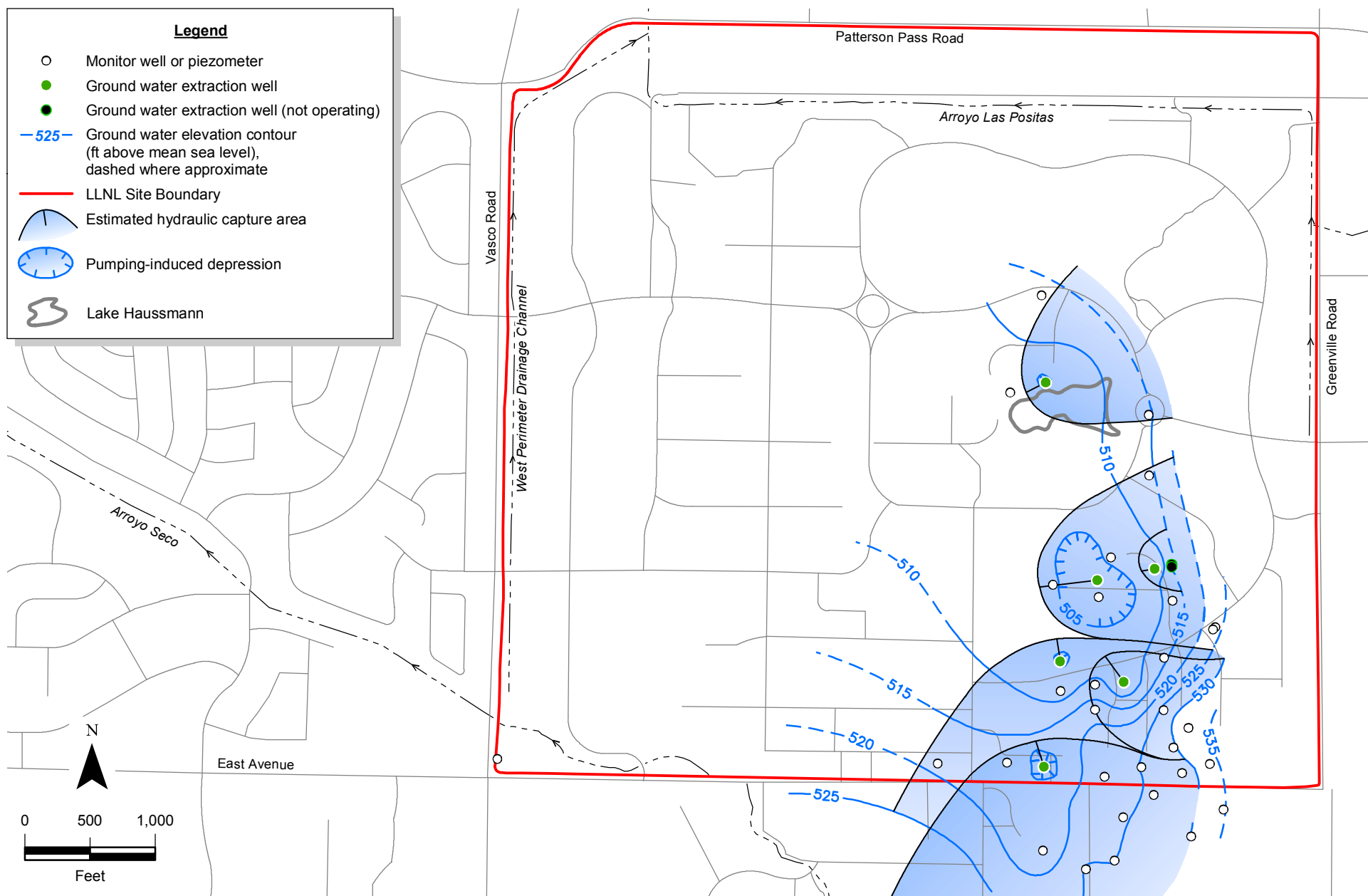


Figure 6. Ground water elevation contour map based on 33 wells completed within HSU-4 showing estimated hydraulic capture areas, LLNL and vicinity, second quarter 2014.



**Figure 7. Ground water elevation contour map based on 41 wells completed within HSU-5 showing estimated hydraulic capture areas, LLNL and vicinity, second quarter 2014.**